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The City-County Area School Unit Plan Applied in Bartholomew County, Indiana

Marie H. Talley

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THE CITY-COUNTY AREA SCHOOL UNIT PLAN APPLIED
IN BARTHOLOMEW COUNTY, INDIANA

BY
MARIE HAGER TALLEY

A Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree
Master of Science

Columbus, Indiana, 1935

COLLEGE OF EDUCATION
BUTLER UNIVERSITY

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TABLE OF CONTENTS

FOREWORD

FOREWORD	Page
TABLE OF CONTENTS	iii

Our cities have shown remarkable progress in the organization and administration of their school systems, but rural areas have lagged far behind. Modern advancements in transportation no longer leave any excuse for so radical a differentiation in educational service.

The purpose of this study is the attempted description of a feasible City-County Area School Unit which will fuse urban and rural schools. An application in the author's home county, Bartholomew, reveals problems involved and advantages to be derived.

Two characteristics of the dissertation are immediately apparent: (1) the meager amount of reference pertinent to the subject, and (2) the entirely tentative nature of material. However, the study is offered in the hope that its pioneering spirit may justify its lack of imposing genealogy.

The uncompromisingly scholarly attitude of Dean W.L. Richardson and the highly constructive criticism of Dr. Albert Mock have been safeguards for which the author expresses gratitude. Their direction and advice have been extremely helpful.

General control	29
educational control	35
M.H.T.	35
Columbus, Indiana, 1935	35
powers and duties of the superintendent	36
Summary	37

IV.—SCHOOL SIZE AS THE DOMINANT FACTOR IN SHAPING THE CITY-COUNTY SYSTEM	38
Optimum size of the elementary school	38
The so-called 12-12-12 school system	41
A teacher per grade	44
Tentative studies of school size	47
High school studies	48
Columbus High School	41
The optimum size of the high school	48
Social studies in the high school	47
Summary	49

APPLICATION OF THE CITY-COUNTY AREA SCHOOL UNIT	43
CHARTER COUNTY	43
Choice of county	48
Limiting factors	50
Present school divisions	52
County area school divisions	53

59429

TABLE OF CONTENTS

	Page
FOREWORD	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	vi
LIST OF CHARTS AND FORMS	vii
 Chapter	
I.--THE CITY-COUNTY AREA SCHOOL UNIT	1
The idea in brief	1
Lack of status	4
Fundamental theory	8
II.--PROBLEMS AND FACTORS OF HINDRANCE IN THE ESTABLISHMENT OF THE CITY-COUNTY AREA UNIT PLAN	12
Transportation	12
Buildings	15
Rural suspicion	16
Urban self-sufficiency	17
Officials' vested interests	18
Political opposition	19
The 6-6 schools	19
Lack of leadership	20
III.--THE CITY-COUNTY AREA UNIT PLAN	22
General control	25
Educational control	25
Business control	25
Powers and duties of the superintendent	26
Summary	27
IV.--SCHOOL SIZE AS THE DOMINANT FACTOR IN SHAPING THE CITY-COUNTY SYSTEM	28
Optimum size of the elementary school	28
The so-called practical considerations	31
A teacher per grade	34
Tentative minimum standards	37
High school standards	39
Columbus High School	41
The optimum size of the high school	46
Social fusion in the central high school	47
Summary	48
V.--APPLICATION OF THE COUNTY AREA PLAN IN BARTHOLOMEW COUNTY: SCHOOL LOCATIONS	49
Choice of county	49
Limiting factors in school locations	50
Present school locations	52
County Area school locations	56

	Page
Discussion of locations	56
VI.--APPLICATION OF THE CITY-COUNTY AREA PLAN IN	
BARTHOLOMEW COUNTY: COSTS OF CURRENT OPERATION	59
Equalization of opportunity	59
Costs by functions	61
Decrease and increase	71
Additional levy	73
VII.--APPLICATION OF THE CITY-COUNTY AREA PLAN IN	
BARTHOLOMEW COUNTY: HOUSING AND CAPITAL OUTLAY	75
The factor of housing	75
Examples of present adequacy	77
Examples of lack of housing	80
Capital outlay	83
VIII.--APPLICATION OF THE CITY-COUNTY AREA PLAN IN	
BARTHOLOMEW COUNTY: SOCIAL PROBLEMS OF THE	
CENTRAL HIGH SCHOOL	87
Columbus High School a type	87
Advantages of school size	88
Bus handicaps	89
Problems of social mergence	90
IX.--THE CITY-COUNTY AREA SCHOOL UNIT BILL	93
Reasons for writing the bill	93
Difficulties of shaping a bill	93
The bill	95
X.--SUMMARY AND RECOMMENDATIONS	101
General nature of the plan	101
Its application in Bartholomew County	103
Recommendations	105
Bibliography	106

LIST OF TABLES

Table		Page
I.	Curricula in Columbus High School	43
II.	Distribution of Time among Subjects in Columbus High School	44
III.	City-County Reorganization in Bartholomew County	55
IV.	Salaries of Township Trustees	62
V.	Average Elementary Pupils per Teacher	64
VI.	Wages of Bus Drivers	67
VII.	Current School Expenditures	72
VIII.	Estimated Capital Outlay in Bartholomew County	85

LIST OF CHARTS AND FORMS

Figure

	Page
1. Chart Showing County Area Organization	23
2. Schedule of classes in Columbus High School . . .	42
3. Location of Bartholomew County Schools with Enrollments and Number of Teachers	53
4. Location of Bartholomew County Schools with Enrollments under County Area Plan	54
5. Suggested Type of Elementary Building	82

THE CITY-COUNTY AREA SCHOOL UNIT AS APPLIED

IN BARTHOLOMEW COUNTY, INDIANA

CHAPTER I

THE CITY-COUNTY AREA SCHOOL UNIT IDEA

The Idea in Brief

The City-County Area School Unit, as an hypothesis in Indiana school administration, provides that the total urban-rural school population of the civil county shall be under the control and in the care of one superintendent, one board, and one supervisory and teaching staff. The plan is simply that we shall utilize the new mobility of our modern mechanical age to assemble pupils in groups large enough to provide an education which can be expert as to administration and instruction, specialized as to curricula and courses of study, and integral and democratic as to the whole design of the natural urban-rural social pattern.

The adoption of the plan in Indiana would result in further consolidation of schools and of school townships, increased departmentalization of the rural elementary

schools, and centralization of the secondary schools at the county seat city or town. Exceptions, caused by the impossibility of transportation due to poor roads, which it would be impractical to improve, or caused by the undesirability of moving pupils from centers of congested population, occur at the lower and upper ends of the range of county conditions in the state, in such counties as Martin and Lake, respectively. But they are exceptions. A majority of the ninety-two counties in Indiana could be most effectively operated as unmodified County Area School Units. The remainder, through such modifications as zoning, partial consolidation, individualized instruction for one-room schools, and other adaptations to unusual local conditions, could be given benefits which cannot be achieved by the use of any other type of organization.

A quick glimpse of how the new plan would reorganize one of the counties well known for its splendid achievements under the township consolidation system, so recently brought into being, is afforded by an examination, even though but a brief one, of Benton County. Fowler, the county seat school, enrolled 413 pupils, grades 1-12 in September, 1933. The ten other townships, each completely consolidated (except for a supplementary one-room school of 23 pupils in Bolivar Township) averaged 214 pupils,

grades 1-12, and the school at Boswell exceeded Fowler with a total enrollment of 472 pupils.¹ If all secondary pupils, grades 9-12 were transported to the county seat, Fowler, the one composite high school would number 725 pupils and employ thirty teachers. As it is, the typical high school (grades 9-12) enrolls 65 pupils and employs five teachers. That is to say, twenty-two of the fifty-two high school teachers now on the pay roll might be dispensed with and the salaries and expenses of eleven trustees eliminated. The saving effected thereby might reasonably be expected to cover the cost of the necessary additional transportation. And the contrast between the actual and the possible educational offerings is at once apparent. The elementary schools could be placed in from one-half to two-thirds as many centers, departmentalized grades 5 to 8, and given expert supervision. The total result should give to the children of Benton County a type of education equal to that offered in the best of small urban centers and the social life of the county area community would tend to shape itself into common pattern. Brief mention of another county, Clinton, with Frankfort as county seat, reveals a different situation. More than twelve hundred

¹Cole, George C., Indiana School Directory, pp. 36-38. Indiana State Department of Public Instruction, 1933-34.

pupils are enrolled in the eleven rural high schools, grades 9 to 12, while the county seat city enrolls seven hundred in the same grades. Under the City-County Area School Unit plan, the high schools would probably be zoned as centering at Frankfort, Rossville, and at Kirklin or Michigantown. The elementary schools which now include six two rooms and a one-room in addition to the eleven consolidated schools, would be absorbed in centers enrolling from two hundred to five hundred. Each county is different from all others. Separate studies should necessarily be made to discover practical adjustments in consolidation.

The purpose of this study is to make a detailed and analytic application of the City-County Area School Unit in the author's home county. Information is both more ready and more practical at home, and the conclusions drawn should, as a result, be nearer the truth and should furnish more feasible bases for action.

Americanization, housing, amelioration of the effects of poverty, business. Lack of Status taxation, the advance of the science of education is the great challenge of

favor. We must face the fact that the City-County Area School Unit is practically unheard of even among educators. Why has it achieved as yet no status in active discussion?

pp. 101-102. Boston: Houghton Mifflin Co., 1912.

The Area plan although intended first of all to increase the efficiency of the educational system in general, has as an attendant very important objective-- the removal of certain discriminative distinctions between rural and urban school situations which by force of circumstance, have been allowed to evolve and become established without rational correction. The very recency of this uncorrected differentiation of progress is startling. Cubberley points out that in 1820 there were only 13 cities in the United States above 8000 population, and in 1861 only 141.² Cities have been hard pressed to keep pace with the march of their own school problems during this period of miraculous growth and consequently have paid almost no attention to the school problems of their neighbors. The really expert school leadership, which has always been resident in the cities, is engrossed with such problems as: the press of growing population, Americanization, housing, amelioration of the effects of poverty, business management and taxation, the advance of the science of education in the urban conditions so favorable to experimentation and research, the demands

²Cubberley, E. P. Public Education in the United States, pp. 101-102. Boston: Houghton Mifflin Co., 1919.

The City-Country Area School Unit idea has achieved no status in the active discussion of educators because city kindergartens, supervision, emergence from political domination, etc. There has been no time to devote to the broader problems of urban-rural education and socialization. Cubberley very vividly pictures the rural neglect:

. . . practically all of the educational progress . . . happening within the last half century has been city progress. This unfortunately for rural and village education is only too true. The firm establishment of the Massachusetts district system in the States, . . . , and the fastening on the schools, as a result of the early democratic movement, of a political instead of an educational basis for the selection of county and state school superintendents, have together combined to deprive the rural and village schools from making the progress needed to meet the changed conditions of rural and village life. The cities, by the early elimination of their school districts and elective superintendents have been able to draw to the management of their school systems the keenest thinkers and the most capable administrators engaged in educational work. In any line of work involving good organization and adaptation to rapidly changing conditions nothing counts for so much as good leadership at the top. Of this our city systems have for long had a monopoly.

The rural and village schools of most of our States . . . have gone along without much change since the days of the 60's . . . They have remained bookish, their work unrelated to farm life, and their influence away from the farm. In consequence, country people have largely lost interest in them, and many have rented their farms and moved to town, in large part to obtain better educational advantages for their children.³

³Cubberley, E. P. Public Education in the United States, pp. 465-467. Boston: Houghton Mifflin Co., 1919.

The City-County Area School Unit idea has achieved no status in the active discussion of educators because city leadership has been absorbed in the whirl of urban progress and because the rural situation has discouraged development of its own leaders. Out of this stagnation of rural progress arises another influence which aggressively quiets any agitation looking toward educational reform which may involve, directly or incidentally, the abolition of political holdings. In the township trustee system flows the life blood of the two political machines in Indiana-- Republican and Democrat. Much has been said, both in exaggeration and in truth about the professional incapacity of the township trustee. However, that issue may safely be laid aside. The present consideration is rather one related to the fact that the trustee's unit of government is too small, rendering his (very desirable) lay service too costly and too obtrusive. He has not sufficiency of either pupils or funds to attract expert school service. But his office does constitute more than one thousand rallying points in campaign years. He keeps local political interests vigorously alive. Being a part of one or the other of our two political machines, he finds himself forced to mix schools and politics or drop out of public life. But, that is not all. Not only does politics find sustenance in our trustee system, but its vigor sustained there, reaches out into our cities

the historic figures of Daniel Mann in Massachusetts, and, Caleb Mills in Indiana. As late as 1942 Indiana was still on their efforts to work with freedom and efficiency.

A third reason for the fact that practically nothing is being said of some plan such as the City-County Area School Unit lies in the reluctance of many city educational leaders to add to their multitudinous duties the attack on an extremely challenging problem-- urban-rural social integration. They can scarcely be blamed. However, a few of the more active and courageous will soon be undertaking phases of the work as the movement gains foothold.

An analysis of obstacles to the adoption of a City-County Area School Unit plan will also reveal forces which have long been at work to discourage sweeping reform. Such an analysis is undertaken in Chapter Two of this study.

Fundamental Theory

The question of the theoretical soundness of the City-County Area School Unit plan relates very intimately, of course, to the theory underlying the support of the whole of our free public school system. The fight for tax supported schools for all children has been long and bitter and opposition still remains. It is easy to recall

the historic figures of Horace Mann in Massachusetts, and, Caleb Mills in Indiana. As late as 1849 Indiana was still voting on the question of free schools. Even to-day and even in the ranks of educators themselves, we find advocates of limitation of educational opportunities for the masses. But, in general, and at heart, both educators and the public realize that democracy, that form of participative social organization which affords protection and stimuli to individual freedom, happiness and productivity, depends utterly, almost pathetically, upon mass education. As Dr. William Lowe Bryan so ably puts it (in effect) -- our schools shall offer an unobstructed high road to every child from the lowest condition of life to the highest specialization he may choose to undertake.⁴ And yet, to-day, right in our own cities and counties in Indiana we find occasionally the poorest type of one teacher rural school or three teacher high school within a fifteen minute drive from urban schools of which we are very justly proud. If we subscribe to the theory that there shall be equality of opportunity for pupils and generalized support of schools affording such equalized opportunity, we can then by no means deny that our present

⁴Bryan, Wm. L. Inaugural Address as President of Indiana University, January 21, 1903. Indiana Pamphlets, Volume 4. No. 10, Indiana State Library, Division of Indiana History.

practices fail to realize the theory to which we have subscribed.

A less fundamental, but very important phase of theory is also involved. The rural schools and rural social leadership have failed to meet the challenge of the Rural Life Problem. Is it good theory to expect urban leadership to do it? By Rural Life Problem is generally meant the radical and entirely possible improvement in rural living conditions-- economical, social, cultural. We have long succumbed to the drudgery of the farm, failed to emulate the farmer as a worker of an extraordinarily high type, educated our children for the appeal of city life, trained our teachers for skills and bodies of knowledge looking toward urban promotion, neglected integration of urban-rural social life, etc.-- the list of maladjustments, or lacks of adjustment at all, is most disheartening. Nor is it in any degree helpful to fall back on the plea that cities have their own urban miseries. Constructive reform admits no cross cancellation of evils.

But will urban school leadership help correct the Rural Life Problem? There are, among others, at least two practical reasons why it should. First, trained leadership already is monopolized by the cities, and cannot be invoked except from the cities. Second, the fundamental

progress of democracy requires the integration of urban and rural social and economic interests and, consequently, of educative interests. There must be common leadership, and, of course, it must be at least as intelligent as present urban leadership, and much more understanding and sympathetic.

It would seem that the idea of the City- County Area School Unit is fundamentally sound as it relates to our American theory of mass education, and to the Rural Life Problem.

Another question of significance arises quite naturally-- Is this the time to bring about the establishment and operation of the plan?

Charles H. Judd, speaking of education generally, answers the question very well:

The schools stand between the generation which is passing out and has no adequate understanding of the new social order and the oncoming generation which is eager to take its part in the world and unwilling to be bound by the fetters of a narrow program conceived and established in a day when machinery was new and cities were uncommon. Our present task is one of consolidation and organization, of improvement and amplification of education.

CHAPTER II

PROBLEMS AND FACTORS OF HINDRANCE

IN THE ESTABLISHMENT OF THE CITY-COUNTY AREA UNIT PLAN Unit
which would increase, and only careful studies in each county

The impediments which are met when one attempts to
apply the City-County Area School Unit idea in Indiana,
despite their hard and practical quality, are really obsta-
cles of minor importance. Certain of these obstructions
inhere in the rural situation itself, others result merely
because of the change from one system to another, and still
others arise from urban self sufficiency. A detailed con-
sideration of the several major factors involved is necessary
as a preliminary to intelligent applications of the plan in
specific situations. used personnel. Planned economy in

Perhaps the first of impediments is that provided
by the sparse population in rural areas and the distances
to rural centers and to the county seat city or town.
However, for the past seven years in Indiana even under the
present system all the schools have spent but eight per
cent of their total moneys in support of current expense
in transportation. Of this eight per cent, less than

four hundredths was urban in 1931-32. Expressed in other terms, it costs about thirteen cents per day for each pupil transported to school for a term of 160 days for the state as a whole.¹

Transportation under the City-County Area School Unit system would increase, and only careful studies in each county of the state would yield valid estimates-- so varied are conditions of distance, roads, and wage practices.

A number of reasons can be advanced to show that feasibility cannot possibly be threatened. In numerous instances it will be found that high school pupils are already hauled to township centers and only the trip to the county seat or other chosen zone center would add to the present cost. And cost of transportation would in part, or perhaps completely, be offset by the lessened cost of instruction due to reduced personnel. Planned economy in transportation would naturally be insisted on under area management and costs would fall in relation to results achieved.

The most important two facts to use as guideposts of thought in this situation are: (1) transportation is the key to unlock the incalculable advantages of a better

¹Cole, George C. Annual Report of the Department of Public Instruction of the State of Indiana, September 1932. Pp. 22-23.

education for rural pupils and the highly desirable and wholesome integration of urban-rural life, and (2) transportation can be greatly increased from its present eight per cent of current operation and still be considered very reasonable, due both to greater benefits derived and to reductions of cost in other functions of the budget.

In a few counties of the state greater centralization can only partially be effected. Hilly country frequently makes good roads cost out of proportion to their value in usage. Although scattering and localizing the distribution of gas tax money helps improve roads of doubtful value impossible of local support, yet in some areas it will be necessary to solve the school problem by gradually removing the population through the extension of state forest reserves. Local public sentiment may fail to admit the necessity, but the necessity is there for all of that.

In other counties considerable zone centralization will be practical because of congested population. There is little to be gained by building huge, unweildy schools when almost all the advantages of modern education and social integration can be gained in secondary schools enrolling from 500 to 1000, and in elementary schools of from 200 to 300 utilizing the area supervision and administration.

A second impediment is the presence of expensive consolidated rural school buildings housing elementary and high schools combined. In many instances, these buildings have but recently been constructed and numbers of them are still carrying unretired bond issues. Moreover, the rural population not increasing, the space adequacy of these buildings does not encourage removal of high school pupils. It is not relevant to state that these schools are monuments to a well meaning but short sighted rural consolidation program. But it is relevant to devise some means of convincing the people that their clinging to an out dated system of school organization must not be colored to an impractical degree because of their investments in buildings when their basic investment is, after all, in the lives of their children and in the prompt solution of the rural life problem. This impediment of buildings is not operative in some counties, is only operative in part in others, and can be obviated in all in the course of time by wise administration.

It will slow up the adoption of the fully effective City-County Area School Unit plan, but it is no argument against it. Certain features of the plan can be placed in effect in all counties, even those hampered by too zealous a building program.

This school must coordinate the community as a whole and educate the children for efficient and cultural living as against two backgrounds. Why have we so long

based our thinking on the mistaken concept that life shall not be fluid as between city and county and that there shall be neglect or lack of respect for the mode of life in either of the two large social groups?

A fourth impediment is the unwillingness of urban residents to feel that they have any obligations requiring them to share their good fortune educationally with their rural neighbors. The compactness of the urban group with its small necessity for transportation, the larger schools will naturally the outcome of heavy population, the concentration of wealth which has permitted the easier levy of adequate taxation on property have led to other factors of progress -- better bidding power in the market of expert and experienced teaching and administration; longer terms; better buildings and equipment; the stimuli of industry, professions, arts; the trades near at hand demanding well trained workers; ease of supervision and group enlightenment among teachers; lessened personal and greatly enhanced professional status of teachers in the social group as a whole. These tremendous advantages came naturally and in antithesis to the outcomes of sparse and scattered population and the relatively poor financial values in the country. As a consequence, being unearned premiums, the urbanite feels they are his right rather than his responsibility as well. Here again a

campaign of propaganda, honestly managed, should transform city opposition to cooperation in the education of the whole community. The city depends in part upon the surrounding countryside for trade in its market, and the city must realize that education creates needs. The social contacts of city and rural pupils will awaken interests among rural pupils in the city mode of life with its conveniences, most of which can be purchased for the farm. More important, the heightened level which the city education will provide will arouse needs otherwise more slowly developed-- superior preparation and care of foods, and dress; reading, both cultural and economic; the habit of utilizing urban services; improved sanitation; control of disease; etc. It has been pointed out many times that frequently the young life blood of the city is vitalized by ambitious country boys and girls absorbed into its mass of population. It is less frequently emphasized, but of none the less importance, that the city benefits economically and culturally by the happier and more efficient lives of those who inhabit the rural circle of the community as a whole, through their increased productivity as workers and their constructive thinking on all public and social questions.

A fifth impediment, the opposition of those in an office dealing with rural education, the county superintendent,

the township trustee,-- may at once be discounted as selfish. The arguments brought forward by these interested persons should be stripped of all inaccuracies in logic and appeals to misplaced sentiment. But one must not under estimate the political power of this group. Nor can it be expected that any amount of campaigning will change their mind set. The human being does not mildly submit to the removal of his daily wage, and he is inevitably prone to feel that he will not fit into a new scheme of things without risk of loss. To remove an office from an office holder is the hardest thing the average American citizen can undertake. Too much office holding is one of the natural penalties of a democracy.

A sixth impediment, the opposition of both major political parties to the upset of their fortress-- the township trustee system-- has already been discussed. The stock argument, "local government", will be loudly ballyhooed up and down the state. We may turn for the answer to our appraisal of what local government has brought us in the way of rural roads and rural schools! It has been kept submerged.

A seventh impediment, the possible loss of the rural 6-6 type school because of moving the senior high school to large centers brings up two phases of a big question. Was the 6-6 plan in rural schools merely a device to permit

departmentalization of grades seven and eight? If so, the City-County Area plan does as well. Is the Indianapolis plan of imposing Junior High School functions on the 8-4 type of school practical? Then we can employ it in the City-County Area system. As for the embarrassment caused cities by the influx of 8-4 type ninth graders in a regular junior organization-- that can be managed.

An eighth impediment, one that will be discussed seriously by educators themselves, is the lack of training which urban leadership exhibits toward the rural life problem and the area mergence of urban-rural schools. Such training cannot be expected in advance. Experiment and experience will do the training out in the field. There is no other practical way to build up a body of knowledge in an untried endeavour. The intelligence of our best urban leaders will work marvels.

There are, it is apparent, adequate and varied reasons for the dormancy of the City-County Area School Unit. It is not at all surprising that it has been kept submerged.

However, when one steps aside from old viewpoints and looks without prejudice at the idea and its implications, he becomes convinced that though the plan does present problems of organization and functioning, yet these problems are

of readier solution than are some of the problems with which educators are vainly struggling under the present antiquated system of school administration.

For purposes of emphasis and perspective it is pertinent to hold in mind at least three major problems unsolvable under the present organization: (1) the undemocratic superiority of urban schools in close juxtaposition to the less favored rural schools, (2) the social cleavage between urban and rural community life, and (3) the appalling failure of our school system to deal with our rural life problem. As a preliminary and tentative statement of the probably desirable form of the City-County Area School Unit, we may have approximately the following, (adapted throughout from Capperley):¹

General Control

In all counties in Indiana the county shall be the unit of school administration under the direction of the City-County Area superintendent.

The City-County Area Board shall be composed of seven representative citizens-- three of which shall be

Capperley, E. P. Public School Administration. Boston: Houghton Mifflin Co., 1922. pp. 449-453.

CHAPTER III

THE CITY-COUNTY AREA UNIT PLAN

Following the consideration of the City-County Area School Unit idea in its essential outline and in its features of theoretical soundness, lack of present status, and its practicality, we come to a more definite analysis of its form and functions.

As a preliminary and tentative statement of the probably desirable form of the City-County Area School Unit, we may have approximately the following, (adapted throughout from Cubberley):¹

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The City-County Area Board shall be composed of seven representative citizens-- three of which shall be

¹Cubberley, E. P. Public School Administration. Boston: Houghton Mifflin Col., 1922. Pp. 449-453.

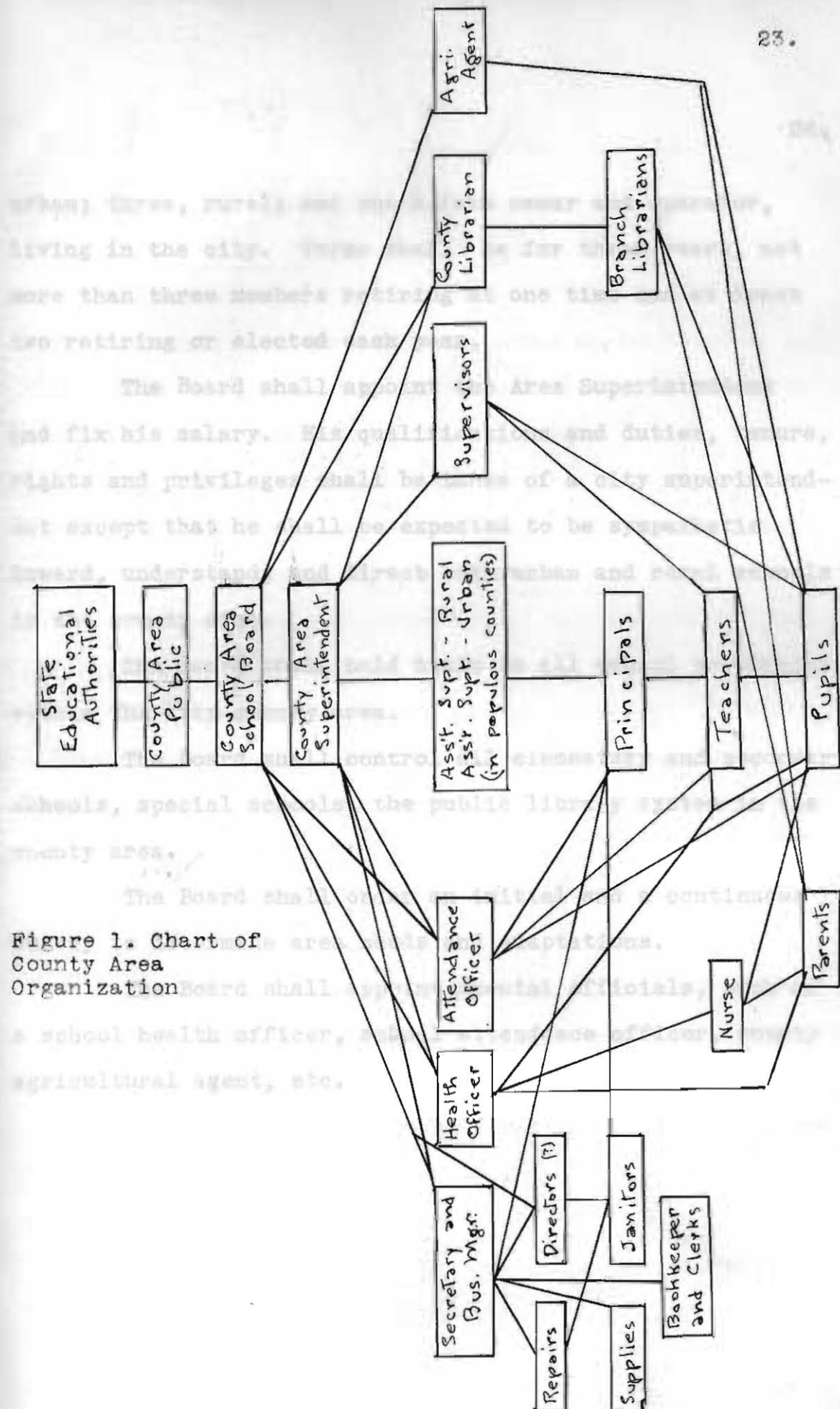


Figure 1. Chart of
County Area
Organization

urban; three, rural; and one a farm owner and operator, living in the city. Terms shall be for three years, not more than three members retiring at one time and at least two retiring or elected each year.

The Board shall appoint the Area Superintendent and fix his salary. His qualifications and duties, tenure, rights and privileges shall be those of a city superintendent except that he shall be expected to be sympathetic toward, understand, and direct both urban and rural schools in the county area.

The Board shall hold title to all school properties within the city-county area.

The Board shall control all elementary and secondary schools, special schools, the public library system in the county area.

The Board shall order an initial and a continuous survey to determine area needs and adaptations.

The Board shall appoint special officials, such as a school health officer, school attendance officer, county agricultural agent, etc.

Charge of all clerical, statistical and financial affairs. This involves purchase of supplies, control of janitors, making of reports and the budget, care of legal papers, keeping all records, etc.

The secretary shall be responsible to the Area Board through the office of the Superintendent.

Educational Control

The Board and its executive officers shall manage the City-County Area as a financial and administrative unit. Taxes shall be uniform throughout. Property tax shall be limited by the state as a whole.

On the recommendation of the Area Superintendent, principals, teachers, and supervisors shall be appointed by the Board and their salaries fixed.

A like procedure shall obtain for special teachers and supervisors.

The public library and its branches and the school libraries shall merge under the direction of a county area librarian appointed by the Board.

Business and Clerical Control

The superintendent shall recommend and the Board appoint a Secretary who shall act as secretary to the Board and shall have active charge of all clerical, statistical and financial affairs. This involves purchase of Supplies, control of janitors, making of reports and the budget, care of legal papers, keeping all records, etc.

The secretary shall be responsible to the Area Board through the office of the Superintendent.

Powers and Duties of the Superintendent

These shall be those commonly enumerated for the City Superintendent, except that:

tative He shall make quarterly reports of progress on problems arising from (a) mergence of urban-rural schools (b) integration of urban-rural social life as directed through allied agencies.

school He shall pay especial attention to the urban-rural supervisory and special teaching program, and the courses of study intended to enrich the Area education plan.

tional He shall maintain an office outside the city school buildings readily accessible to urban and rural citizens and leaders.

He shall cause to be built an enlightened public opinion on the interrelations of urban-rural social life and shall identify himself with both urban and rural social organizations.

Summary

The City-County Area School Unit shall be administered by a Board of seven citizens equally representative of urban and rural interests. The Superintendent shall have the rights and duties that now characterize the office of city superintendent, but he shall be expected to work at the major problem of fusing urban and rural school and social life. The City-County Area shall be a school unit in matters of finance; school properties; school staff; special services, such as - library, health, vocational supervision; and all control, general, business, and educational, shall center in the Board through its executive, the Superintendent.

Many factors beside the point at issue -- how small an elementary school be and yet provide conditions that are equally favorable to expertness of teaching and to readiness of learning -- have long influenced the placement and size of decentralized elementary schools under our present type of school management. But, in truth, the factor of size alone should always be the first consideration, however much it may now be relegated to the background. It is the essential of any complex of factors. Laymen and educators alike must keep in the focus of their thought the central fact

CHAPTER IV

SCHOOL SIZE AS THE DOMINANT FACTOR IN SHAPING

THE CITY-COUNTY SYSTEM

The Optimum size of the Elementary School

What is the minimum size of the readily efficient elementary school?

Upon the answer to this basic question rests in part the solution to one of the most important problems in the reorganization of schools according to the City-County Area Plan - the problem of elementary school location and transportation.

Many factors beside the point at issue -- how small can an elementary school be and yet provide conditions thoroughly favorable to expertness of teaching and to readiness of learning -- have long influenced the placement and size of reorganized elementary schools under our present type of school management. But, in truth, the factor of size alone should always be the first consideration, however much it may now be relegated to the background. It is the essential in any complex of factors. Laymen and educators alike must keep in the focus of their thought the central fact

that the schools exist for the children. An elementary school should never be smaller than is consistent with efficiency in pupil achievement. That it too frequently is, should be due only to insuperable obstacles -- certainly not to mere disregard of sensible minimum standards of enrollment.

It is always enlightening to approach any problem from reverse. Delimitations are more easily and definitely established. How large, then should an elementary school be?

In great cities standards of size fall within the range of enrollments from 1500 to 2000.¹ Back in 1915 there seemed to exist a marked tendency toward the twenty room elementary school with from three to seven rooms as extra, housing about 800 pupils.² But experience has shown that larger units are more economical of finance and of educational energy. Elementary pupils are expected to walk as far as one-half mile in cities if necessary, so that heavy enrollments can be obtained readily in congested areas. Teaching techniques have improved -- homogeneous groupings,

¹Strayer, G. D. and Engelhardt, N. L. Baltimore School Survey, 1920-21, Volume One. P. 225. Board of School Commissioners, Baltimore.

²Strayer, G. D. Some Problems in City School Administration (Butte Survey). P. 431. World Book Co., 1916.

individualized instruction, etc. Large type schools enable educators to employ these devices, and to extend specialized offerings. Should be apparent. We must keep in mind, in all

regard, But in the suburbs of large cities, in smaller cities, and in rural areas under transportation, the question of a standard of minimum as opposed to maximum size in relation to easy efficiency has long been in reality of prime importance, even if to a great degree ignored. And City-County reorganization will fortunately force the main issue -- economy of educational effort.

The numerous factors which both ideally and practically condition the size of an elementary school, converge into the possibilities and standards of (1) the desirable extent of pupil coverage per teacher and of work coverage per teacher, and (2) the amount of school population that is, or can be made, available. The complex interrelations of the many minor inferences and applications of these two essentials, however, furnish opportunities for no end of confusion and false values. And, judging both from an examination of educational literature and from an observation of practice in the field, little realization of true progress has come as yet. Almost no organized study has been given to the subject, and no set of scientific standards has been consciously devised or deliberately applied.

have carefully avoided territorial jealousies of township

There must, of course, be some reason for this evident neglect, and since the problem is one of basic significance, the reason should be apparent. We must keep in mind, in this regard, that administrators are just emerging from an era of over emphasis on the physical, as contrasted to the pedagogical, features of schools and school plants. Practical school leaders have been too busily engaged in engineering, in manipulating materials easily handled. Ventilation, lighting, heating and kindred fascinating techniques have engrossed their attention to the exclusion of a more difficult fundamental of greater value--what may be the optimum size of the small elementary school?

It must be admitted that exigencies have long shaped our schools. In the emergency of organizing an elementary school unit in rural and suburban areas, and in the construction of its housing, great stress has fallen upon the so called practical considerations. Administrative units, neighborhood integrities, and community entities (except for one teacher districts) have been left largely unmolested in the fear that oppositions to expenditures of money can easily be aroused and the chance for improvement be lost. Public attention has been directed almost wholly upon the modernity of the building or upon the abandonment of a few one room schools. In rural areas, reformers have carefully avoided territorial jealousies of township

up minimum standards.

A tentative and very cursory analysis of the several factors involved in a study of that type might include the following major and minor topics:

I. Desirable teacher coverage

1. Of Pupils

A. Size of classes
B. Number of grades per teacher

C. Number of grades in the school; 1-6, 1-8.
2. Of work

A. Amount of departmentalization
B. Number of courses offered

C. Service of special teachers

II. Number of Pupils Available

1. Under present organization of school unit

A. Many, or few

B. Degree of need for transportation and problems related thereto

2. Under City-County reorganization of school units

- A. Many, or few
- B. Degree of need for transportation and problems related thereto
- C. Problems of reorganization; size, designation, and control of new unit; etc.

How many pupils can the elementary teacher teach and manage? It is to be remembered that the elementary school, unlike the high school, provides more or less continuous and direct contact of pupils and teacher, a situation necessitating class room discipline and control at the expense of time and wearisome effort. Moreover, the question is -- how many can be given careful and vitalized instruction and the guidance of individual attention.

A recent expert recommendation sets 40 as the average number of pupils per teacher but infers that 35 is better by thus qualifying its statement: "Until the passing of the acute financial situation justifies decrease."¹

Moreover standards for the size of the ideal classroom allows seating for from 35 to 40. So carefully have these measurements been established that they have the

¹ Report of the Survey of the Schools of Chicago, Illinois. Vol. I, pp. 164-5. Teachers College, Columbia University, New York City.

² Strayer, D. D.--and Engelhardt, W. L. Standards for Elementary School Buildings. P. 31. Teachers College, University. New York City, 1923.

stamp of hard practical experience upon them and represent the findings of both survey and experimental methods of research. The length of the room is determined by the possibilities of ready seeing and hearing on the part of the pupils in the rear row of seats. The width is arrived at by ratio of glass area to floor area. And the height of the room is established largely through consideration of the factors of air space, heating and ventilation, and costs of construction.¹ To increase the size of the room is undesirable from the standpoint of engineering as well as from the viewpoint of pedagogical efficiency. The conclusion is that one is safe to set 40 as a maximum elementary teaching load.

Another important question is frequently brought up. Should a teacher have more than one grade, let us say the 4th, for instance? Or should she have only one semester, the 4B or the 4A?

It is immediately apparent that the greater the concentration of pupil levels of interests and abilities, the greater the possibilities for teaching specialization. The one-semester teacher, particularly the departmental teacher, enjoys the fullest possible measure of that type of concentration.

¹ Strayer, G. D. and Engelhardt, N. L. Standards for Elementary School Buildings. P. 31. Teacher's College, University. New York City, 1923.

However, other considerations enter. There is demonstrable value in not moving a pupil frequently from one teacher to another. Guidance and the personal touch are easily lost in such rapid transfer of contacts, and the child must have continuity of treatment. There are those educators who argue that a child should be watched in his growth by one person in particular throughout his 6 or 8 years of elementary schooling -- that is, through the agency of a sponsor for a guidance group.

Since pupil welfare is the most important pedagogical consideration in the whole intermixture of factors relating to elementary school size, it is reasonable to accept the trend of the argument -- which is to the effect that the optimum size of the small school occurs somewhere near 8 or 9 teachers for 275 to 325 pupils for the first 8 grades.

Although it is true that more advantageous pupil groupings, readier associations of teachers on same grade levels, greater social stimulation of pupils and teachers, and relatively reduced economic overhead occur after an enrollment of about 1000 has been reached, etc., yet the one great advantage of concentrated and specialized work without serious loss of guidance contact is obtained in the school of 300.

Occasionally in a school of 300 pupils, grades 1 to 8, it may be found desirable to enlarge the staff from a stringent 8 to a liberal 9 or 10 to care for the always more numerous primary children. The percentages of enrollment in the lowest grades are materially higher than those of the upper grades.¹ And, it is necessary, too, to provide some scheduled time for the teaching principal to do administrative and supervisory work.

However, for general purposes, it seems sensible to set up a minimum standard for a school of grades 1 to 8 with an enrollment of 300 and with a staff of 8 teachers. If the school is a feeder for a Junior High School and houses only grades 1 to 6, then its corresponding size would be an enrollment of about 225 and a staff of 6.

In the school of grades 1 to 8 there may be found the desirability of departmentalizing the work of grades 6, 7, and 8. That can be done with the same number of teachers that is used in the traditional organization. It is better done, however, with an additional half time teacher, leaving the principal free for a half day to care for his many duties. He can gain administrative time also from the visitation of special teachers who work in other schools as well, doing Domestic Science, Manual Training, Music,

¹ Strayer, G. D. and Engelhardt, N. . Standards for Elementary School Buildings. P. 32, Teachers College, Columbia University. New York City, 1923

Art, etc.

Enrichment of courses and expansion of curricula may mean additional teaching service, but 8 teachers in a 300 pupil school with the aid of a few special subject teachers who visit periodically can do much to provide a full and varied program. One can readily enough set up tentative standards of minimum size. The trouble comes in getting such a school in rural areas. In large cities, not a great number of schools fall below 300, and those that do benefit largely from supervision and itinerant teaching services. In towns and small cities the difficulties of establishment are not serious, except that the problem of transportation seems to urban residents a bugaboo rather than a genie of advancement. Transportation can solve the small ward school problem at no great expense. Under the shining cloak of its beautiful new high school, many a town hides its inefficient little elementaries. If any units must be small, let them be primary schools?

In the state of Indiana a number of townships cannot provide pupils enough for a 300 pupil rural elementary school. Roads are greatly improved, however, and distances no longer constitute reasonable barriers to concentration of pupil population. Remembering always that several of the southern

² Ibid. "Clinton County", pp. 55-56.

townships might better be in forest reserves, and that their only educational salvation lies in the individualized instruction type of one room school,¹ we still are safe in saying that Indiana as a whole could rise to an approximation of the minimum standard of 300 pupils and 8 teachers for its elementary schools. But to do it, administrators must obliterate township lines.

Ideally, the city superintendent must become the leader of education for the City-County Area. Financial support should come largely from the state to provide a general minimum program and to overcome the selfish stalemate of local urban-rural and intra township jealousies. The new plan should provide one central high school, with infrequent additional ones in outlying town centers only when enrollments justify them.² All the elementary schools should be reorganized under transportation into units with lower limits of 300 for 8 teachers and 8 grades (or of 225 for 6 teachers and 6 grades), with no upper limits where areas of contributing population provide larger enrollments.

Such reorganization cannot be effected? To doubt that it can is to admit immediately the fact that one of

¹Cole, Geo. C. Indiana School Directory, 1933-34 "Martin County," pp. 206-8. Department of Public Instruction, Indianapolis.

²Ibid. "Clinton County", pp. 55-58.

the prime considerations in elementary consolidation has not been the optimum size of the small elementary school.

The time has come when educators are giving serious thought and effort to the equalization of educational opportunity in urban and rural areas.¹ Only mergence can provide true equalization, and one of the fundamentals of such reorganization is the effective size of the elementary school.

Careful and scientific experimentation and observation should definitely set up standards that will be commonly accepted. Until studies of that type can be made, the common-sense of the situation indicates that lower limits of elementary enrollment should range around 300 with one teacher applicable to the high school. Departmentalization, the offering of four studies per semester, the credit system, majors and minors, extra curricular activities, and other

The Optimum Size of the High School

The optimum size of the elementary school units, determined by the enrollment most effective for good teaching, is the dominant controlling factor in shaping the City-County system. School locations and the program of transportation must fit educational needs. a general, cultural

¹ Twelfth Yearbook of the Department of Superintendence, Chapter II. National Education Association, Washington D.C. 1934. destined for industry and the trades. It must

be large enough to let the bell shaped curve of normal

probabil A second factor of equal importance is the optimum size of the high school. Centrally consolidated secondary schools in the county seat cities or towns in certain of the counties in Indiana may exceed in enrollment the standard best suited to scholastic achievement and social welfare. In such instances, the problem of zoning will arise. How small may the good high school be? ability.

A working definition is needed. That the optimum size of the high school cannot be as carefully delimited as that of the elementary is at once evident, for it is apparent that the standard of a teacher per grade is inapplicable to the high school. Departmentalization, the offering of four studies per semester, the credit system, majors and minors, extra curricular activities, and other features of the high school make the determination of optimum size a difficult matter. The schedule of classes for

The desirable City-County high school, however, has definite characteristics. It must offer education satisfactory to pupils: (1) who cannot or will not continue their training in college, and desire a general, cultural course, (2) who are going to college, (3) who are entering agriculture, (4) who are going to work in offices, (5) who are destined for industry and the trades. It must be large enough to let the bell shaped curve of normal

who do not care to graduate and who do not take English.

probability as applied to Intelligence Quotients include a number of the very bright to furnish leaven for the masses-- leadership. It must be large enough to give a sense of power to the student body through group accomplishments in curricular and extra curricular activities. And it should be large enough to permit sectioning of at least the first and second year pupils on the basis of mental ability.

Columbus High School, in the author's home county, Bartholomew, enrolls from 975 to 1000 pupils. An analysis of its schedule of classes, its activities, and of some of its procedures and possibilities of procedure, reveals that its size closely approximates the optimum. Furthermore, its school population, half rural and half urban, is ideal for the purpose of this study since it resembles in that regard the typical City-County high school.

Reference to Figure 2, the schedule of classes for the second semester of the school year 1934-35, shows the offering of the school. Table I lists the curricula. Table II presents a tabulation of periods per day per subject.

Pupils who expect to graduate are required to take four years of English. An exemption of one year is granted to students in Agriculture and the Shops. A number of boys are enrolled in the Machine Shop and Auto Mechanics courses who do not care to graduate and who do not take English.

TABLE II. DISTRIBUTION OF THE TIME OF TEACHERS AMONG THE SUBJECTS OFFERED IN COLUMBUS HIGH SCHOOL

TABLE I. COLUMBUS HIGH SCHOOL CURRICULA

I. Subj.	College Preparatory	Number of Periods Per Day	Per Cent of Total	Number of Teachers				
II.	Liberal Arts							
III.	Agriculture							
IV.	Commercial							
V.	Shop							
English		35	21.0	7.				
Latin		9	5.4	1.8				
French		5	4.8	1.8				
Mathematics		20			Required Credits			
Social Studies		25	15.4	4.9				
Subjects					I	II	III	IV
Natural Sciences		10	8.9	8.				
English		8	8	8				
Commercial Subjects		12	7.2	2.9				
History		6	6	4				
Science		2	2	2				
Mathematics		4	2	2				
Manual Tr. or Dom. Sci.		2	2	2				
Language		4						
Agriculture				16				
Shop								14
Commercial								11
Elective		6	12	4				2
Totals		32	32	32				32

Note: One-fourth credit per semester is required in Physical Training, but the total of two credits is not included in the total of thirty-two.

TABLE II. DISTRIBUTION OF THE TIME OF TEACHERS AMONG THE SUBJECTS OFFERED IN COLUMBUS HIGH SCHOOL

Subject	Average Number of Periods Per Day	Per Cent of Total	Relative Number of Teachers
English	35	21.0	7.
Latin	9	5.4	1.8
French	8	4.8	1.6
Mathematics	20	12.0	4.
Social Studies	23	13.8	4.6
Natural Sciences	10	6.0	2.
Commercial Subjects	12	7.2	2.4
Shops	21	12.6	4.2
Agriculture	6	3.6	1.2
Home Economics	9	5.4	1.8
Physical Training	6.4	3.8	1.3
Art	3	1.8	.6
Music	1	.6	.2
* Special Classes	3	1.8	.6
TOTALS	166.4	99.8	33.3

* The Special Classes supplement the subject fields of the various academic curricula.

such instances as - one teacher who does nothing but English, History, one teacher who has only French while another

For these reasons the per cent of periods taught is not 25 as it would be if all did take English for four years. Instead the per cent is 21. And the 21 per cent represents the work of the equivalent of 7 teachers calculated on the basis of 5 fifty-five minute periods per teacher per day. (The sixth period is spent in assembly duty or in assigned Activity Sponsorship.) The school then has an offering requiring the services of an equivalency of 33.3 teachers figured on the basis of 3 per cent representing the time of one teacher. And so it actually checks out when the schedule is analyzed in detail, as it is in the column listing the relative number of teachers.

The question is - how small could a high school be and yet preserve the subject-teacher ratio offered by the 1000 pupil enrollment? If one teacher is allowed for the Natural Sciences, one for the commercial subjects, one for Art and Music, two for the Social Studies, three for English, etc., - cutting the Columbus High School staff into about half - it seems possible to continue the essentials of the same curricula. That is, it is barely possible to operate the same type of school for 500 pupils.

But a school of 500 pupils lacks the teacher specialization of the school of 1000. By specialization, is meant such instances as - one teacher who does nothing but U. S. History, one teacher who has only French while another

has only Latin, one teacher who devotes all her time to Freshman English, etc. Such scheduling is quite feasible in the high school of 1000 and very limited in the school of 500.

The school of 500 finds sectioning of classes difficult in English and Mathematics and almost impossible in Latin. Extra curricular activities cannot be so varied. The school spirit is not readily evoked in all directions. One activity may receive too much emphasis - as basketball. The number of very bright pupil leaders is reduced. The sense of power through mass is noticeably weaker than in the school of 1000.

In summary, it may be ventured that the good high school needs an enrollment of at least 1000 pupils. The high school of half that size can offer the same curricula but it lacks effective teacher specialization, balanced pupil interests, and power through mass.

As high schools go above 1000 they increase in specialization and variety of interests but the ratio of such increase to increase in essential educational and social values is no longer of great significance. For example, having one teacher who does U. S. History is almost as good as having two so far as specialization is concerned. And in extra curricular activities, duplication of clubs is not an advantage. The school may even get

so big as to lose cohesion and social unity.

Because most of the essential values of the secondary schools are realized in a school of 1000, that enrollment is reasonable to accept as a standard of optimum size. An enrollment of 500 should be a minimum.

Parallel to the standard of optimum size is another factor of extreme importance in the City-County high school--the factor of fusion. It is in the county seat high school in the typical city - county reorganization that rural and urban pupils are merged to their mutual social advantage. The rural student is not only given the advantages of the larger school in specialization of teachers and extended curricula, he is also given the privilege of varied and numerous social contacts. The urban student receives the benefits of an enlarged school and a heightened classroom morale. Together the two groups benefit most as they move from mergence to fusion. The county seat school center becomes the social center. Acquaintances and friendships are general over the whole area. The center will prosper in trade. Culture will increase. There will no longer be a sharp contrast between the two modes of life - urban and rural.

County after county in Indiana can have such a high school center, meeting both standards - that of optimum size, and that of actual fusion of social interests.

SUMMARY

The City-County school system is shaped by: (1) the size of the elementary schools, which should be large enough to effectively use one teacher for each of the eight grades, from 250 to 300 pupils; (2) the size of the central and other high schools, which should be large enough to permit teacher specialization, recognition and utilization of the range of mental ability among pupils, varied curricular and extra-curricular offerings, and a sense of power through mass, - about 1000 students; and (3) the location of the central high school at the county seat, which is possible in most counties, to provide for the fusion of rural and urban social life.

Bartholomew County has been chosen not because it provides the best opportunity to furnish dramatic and convincing evidence of the value of the Area idea, but because the author's local residence provides a more ready command of the facts in the case and close contact with neighborhood values and prejudices.

The particular phase of reorganization studied here is that of school locations in Bartholomew County.

Two preliminary discussions are necessary before

CHAPTER V

APPLICATION OF THE CITY-COUNTY AREA PLAN IN BARTHOLOMEW

COUNTY: SCHOOL LOCATIONS

In the previous chapters the idea of the City-County Area School Unit has been stated and analyzed. The definition of the plan, its lack of status in political and professional circles, the hindrances to its establishment and operation, its main provisions and the size of schools in relation to the location and number of both elementary and high schools have been topics under consideration.

In this chapter the application of the City-County Area School Unit is undertaken for the purpose of developing a specific example of one of the more technical factors which condition establishment of reform of this sort.

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The particular phase of reorganization studied here is that of school locations in Bartholomew County..

Two preliminary discussions are necessary before

application is made: (1) a listing of those limiting conditions which shape the new school system, (2) a picture of the school county as it now exists. Plotting the redistribution of schools becomes then more intelligible.

and the High schools, to be economically operated, and to offer variety of curricula should enroll at least five hundred where at all practical, and probably cease obtaining many of the advantages accruing from size at about one thousand enrollment. Their enrollment is a first consideration in location, then follows the factor of distance. In many counties there occur enough natural centers that zoning if necessary, is quite easy. And in many other less populous counties the county seat city or town becomes the only logical site for the one high school of the City-County Area. In practically all counties the distance to county seat is no precluding factor. Good roads, however, are always important.

The major problem results from attempting to set up elementary school centers over the county. A number of limitations immediately assume importance.

While no absolute criterion of size is possible, yet it is apparent that an elementary school can function best if at least the minimum standard of a teacher per grade is maintained. If the teacher can work with an average of from thirty to thirty-five pupils, the total

enrollment becomes from two hundred to three hundred. However, as a school approaches three hundred it tends to develop a need for another teacher in the primary grades due to an accumulation of pupils there because of retardates and the naturally larger enrollments in the lower grades. In actual practice, the tendency would be to assign ten teachers to a school of three hundred, permitting the eighth grade teacher part time in which to assist the County Area staff in administrations and supervision, and permitting flexibility in primary work. Grades five to eight would likely be departmentalized.

It is likewise apparent that an enrollment of from four hundred to six hundred in an elementary school is not undesirable in the opinion of many educators because it allows a minimum of one teacher for each semester of grade level. Sixteen teachers averaging thirty to thirty-five pupils could take care of an enrollment of from four hundred and eighty to five hundred and sixty. Actually, however, more than sixteen would be needed because of the larger class sizes in the primary grades, the opportunities for special teaching, the demands of departmentalization and of administration. Perhaps twenty is the better number.

In this matter of elementary teachers, it is to be noted that reorganization scarcely reduces the number in

most counties, but it promotes efficiency. The City-County Area plan, however, does reduce the total number of high school teachers in practically all instances.

Distances can always be counted on to pull enrollments down. Road conditions occasioning slow rides, or extremely sparse population having the same effect so far as time is concerned, also furnish handicaps to concentration of pupils. There are even instances where it is practical for only horse drawn hacks to act as feeders for a motor bus in completing a route from a hilly to a level country.

Another factor which cannot be disregarded in the location of schools is the guiding principle that elementary zone centers must be chosen always with an eye to the further transportation of the high school pupils of that particular community to the center high school. Economy of time and of expense can thus be achieved. The outcome, however, is a marked tendency to locate the elementary centers nearer the county seat than they would otherwise need to be. This is sometimes the more true in Bartholomew County because of the location of a site on a state highway.

Figure 3 shows the present distribution of schools in Bartholomew County together with their enrollments both elementary and secondary, and their number of teachers.

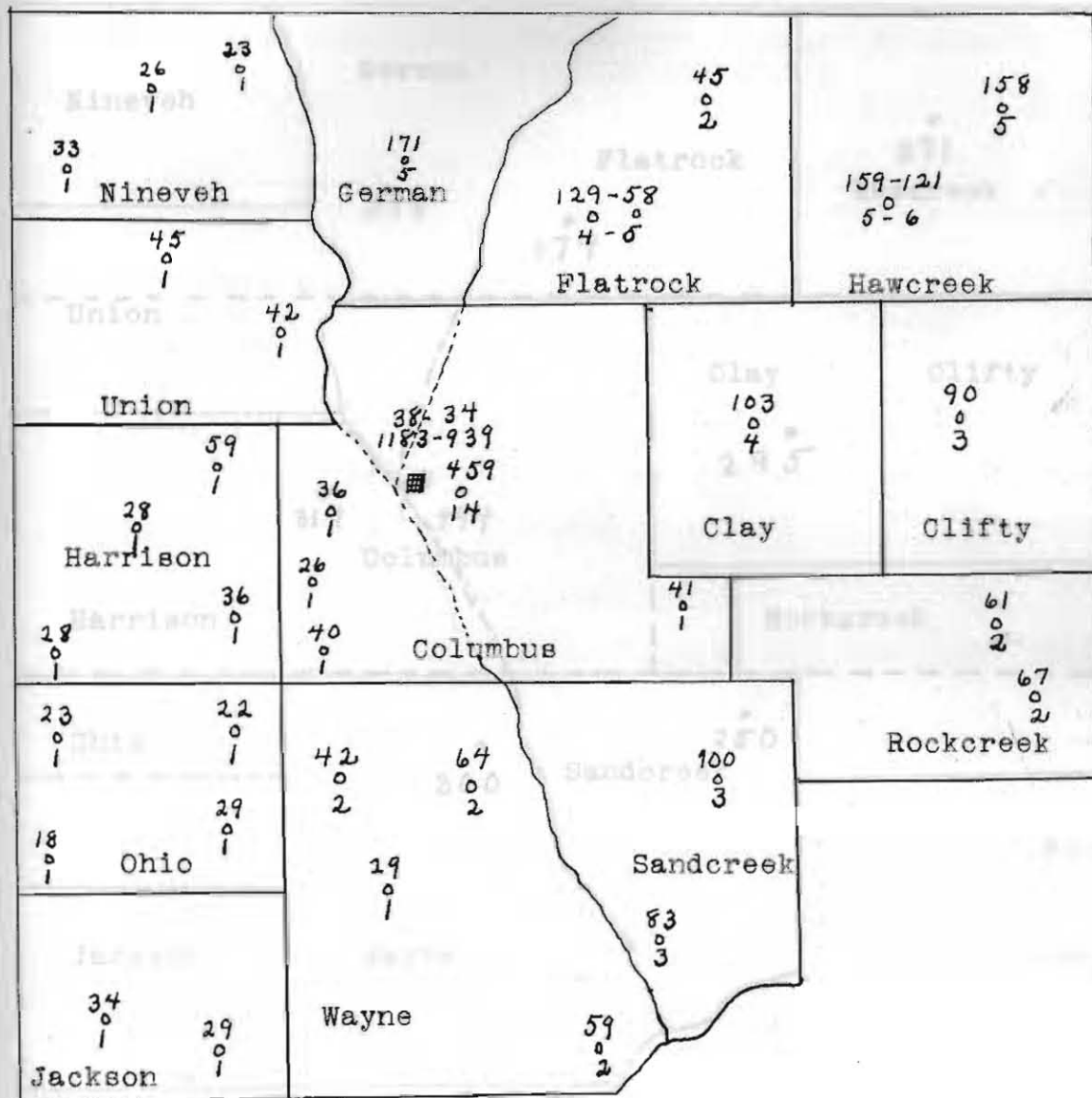


Figure 3. Location of Bartholomew County Schools with Enrollments and Number of Teachers.

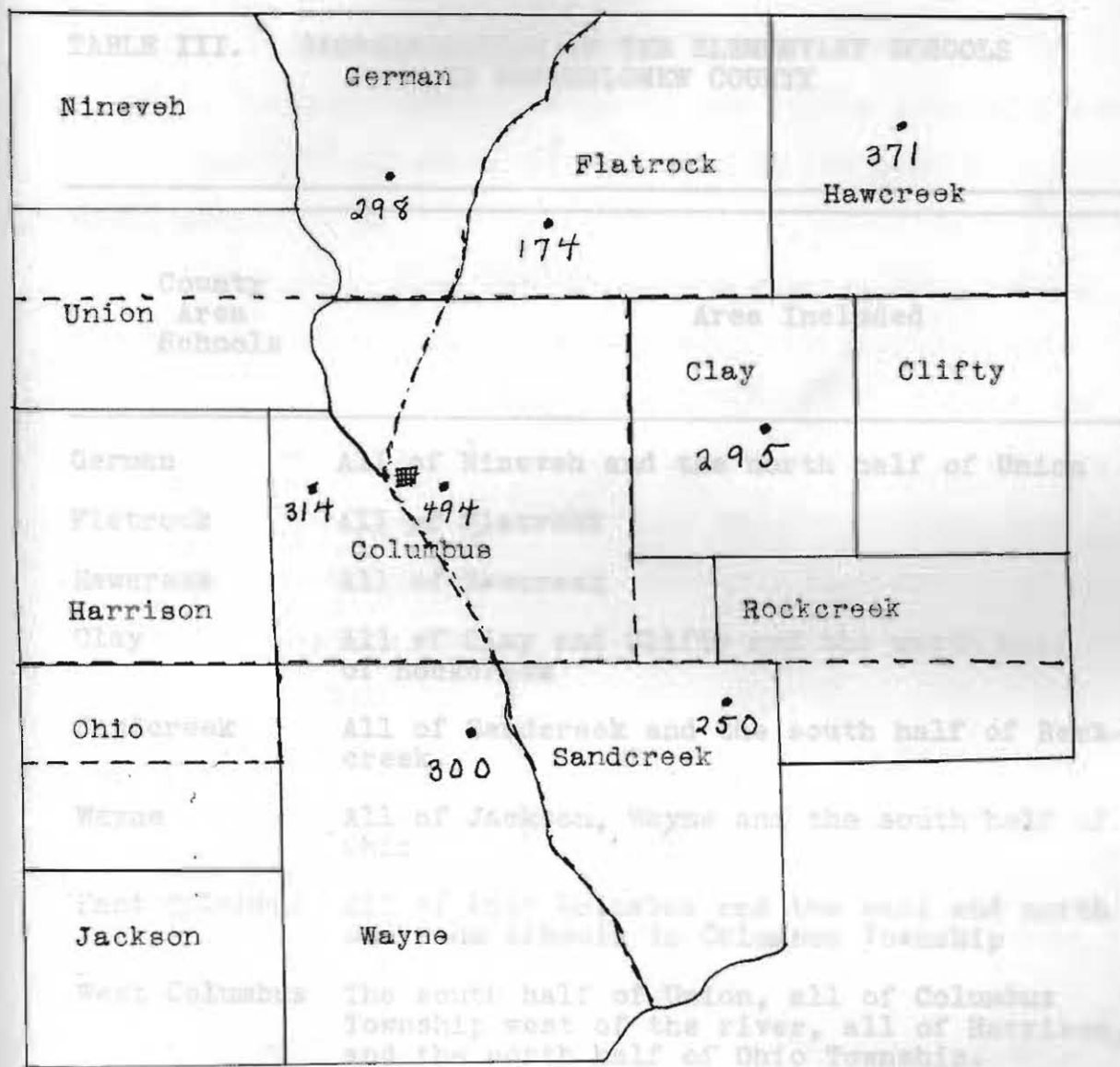


Figure 4. The City-County Reorganization in Bartholomew

TABLE III. REORGANIZATION OF THE ELEMENTARY SCHOOLS
IN BARTHOLOMEW COUNTY

County Area Schools	Area Included
German ¹ , and Flatrock	All of Nineveh and the north half of Union
Hawcreek	All of Flatrock
Clayton, divided	All of Hawcreek
Sandcreek	All of Clay and Clifty and the north half of Rockcreek
Wayne	All of Sandcreek and the south half of Rockcreek.
East Columbus	All of Jackson, Wayne and the south half of Ohio
West Columbus	All of East Columbus and the east and north one room schools in Columbus Township
	The south half of Union, all of Columbus Township west of the river, all of Harrison, and the north half of Ohio Township.

¹ Cole, George C., *Indiana School Directory*, pp. 54-55.
Indiana State Department of Public Instruction, 1933-34.

The three high schools--Columbus, Flatrock Township, and Hawcreek Township are indicated by the double sets of figures, the latter half of which in each case is the high school enrollment.

The rural area has twenty-one one-teachers schools, seven two-teacher, three three-teacher, one four-teacher, two five-teacher, one large elementary school of fourteen teachers, and the two combined elementary and high schools --a total of thirty-seven schools. The rural elementary teachers number eighty-one and the rural high school teachers eleven, divided on the 8-4 basis. The total rural elementary enrollment is 2496.¹

Figure 4 shows the application of the City-County Area plan. The rural area has eight elementary and no high schools. Enrollments range from one hundred and seventy-four to five hundred and thirty-five and average three hundred and twelve.

For the sake of visualizing the procedure and in concession to existing municipal boundaries, the blocs of pupils have been moved largely by townships. That, however, cannot be the ultimate establishment of enrollments.

¹ Cole, George C., Indiana School Directory, pp. 34-36. Indiana State Department of Public Instruction, 1933-34.

The county must be surveyed as a unit, the residences of all pupils plotted, and bus routes mapped. Neighborhoods should be respected as much as possible, natural barriers, such as seasonably flooded lowlands, etc., considered, and as nearly as can be, boundaries set up.

Table III shows the redistribution of pupils. In the tentative reorganization, certain tendencies and discrepancies become at once apparent and require explanation.

The western tier of townships has no schools. The country is hilly, not as well populated as the remainder of the county, and has relatively poor roads. All buildings are of the one room type. Moving pupils toward the center high school and to an arterial highway accounts for the Wayne location. The Columbus 314 and the German 298 are but slightly removed from the hills. The Flatrock 174 is not a good delimitation. The Hawcreek 371 is off center because of the location of the town of Hope. The Clay 295 is occasioned by the moving of Clifty and a part of Rockcreek toward the high school on a state highway. Sandcreek's 250 can be made to serve a part of the adjacent county. And the East Columbus 494 has added the enrollments of two one-rooms, neither of which it needs.

In comparing the redistribution with the original, it is well to keep in mind that the river is a real barrier

in the lower half of the county, although not so much so in the upper half because it is more frequently bridged there. State Road 31 goes past the German, Columbus, and Wayne locations. State Road 46 passes the Clay, and West Columbus sites. State Road 7 passes the East Columbus and Sandcreek schools. The central buildings of Flatrock and Hawcreek lie in a level country of good roads.

Reorganization results in the reduction of rural elementary schools from a scattered 37 to a concentrated, purposeful 8; and in the complete absorption of the two rural secondary schools into the county seat high school at Columbus, which would then enroll a number of pupils ranging from 1100 to 1200. The new elementary schools range in size from an enrollment of 174 to one of 494 - not a strict adherence to the standard of 250 to 300. But the average unit enrolls 312, and five of the eight schools stay within the desired range.

Bartholomew County is already well used to the idea of county wide high school service, and has learned the technique necessary to the solution of the transportation problems involved.

The plan is simply that we shall utilize the mobility of our modern mechanical age to assemble pupils in groups large enough to provide an education which can be expert as to administration and instruction, specialized as to curricula and courses of study, and integrative and democratic as to the whole design.

CHAPTER VI

APPLICATION OF THE CITY-COUNTY AREA PLAN IN BARTHOLOMEW

COUNTY: COSTS OF CURRENT OPERATION

Equalization of educational opportunity is impossible without the mergence of urban and rural schools. The state and federal programs, which have been so widely discussed in recent years, will in the future recognize the inestimable and peculiar values of the fused local organization.

The city-county area school unit, taking advantage of the ready functioning of the civil boundaries already set up, is one example of the possible adaptation of the idea to the practical situation. It provides that the total urban-rural school population of the civil county shall be under the control and in the care of one superintendent, one board, and one supervisory and teaching staff. The city superintendent is usually the strongest educational leader in the area. To him, ordinarily, the new job will be delegated.

The plan is simply that we shall utilize the easy mobility of our modern mechanical age to assemble pupils in groups large enough to provide an education which can be expert as to administration and instruction, specialized as to curricula and courses of study, and integrative and democratic as to the whole design

of the natural urban-rural pattern. Educators with the most seasoned of practical vision will readily admit that within a fifteen minutes' drive from urban schools of which we are very justly proud, we can frequently come upon the poorest types of one room elementary and three teacher high schools in our present organization. That cannot be consistent with the fundamental theory of education for a democracy.

The same type of educator will at once inquire--how much does reorganization cost and what will be the expense of operation under the new plan.

Laying aside questions of educational advantage and leaving for later consideration the first cost of the reform, let us examine, even though superficially, the expense entailed in the current operation of the city-county area plan as applied in Bartholomew County, Indiana. By being specific, we may uncover the strengths and the weaknesses of the financial aspects involved.

Map 3 shows the present set up, and map 4 the proposed reorganization. The 37 elementary schools are reshaped into 8 larger ones, and only one high school remains - that at Columbus, the county seat city. Details of the new arrangements are outlined in Table III.

(Turn back to pages 53 and 54.) The objective is the establishment of a teacher per grade for rural elementaries, and complete high school centralization.

Consolidation of this type is highly practical from the pedagogical and sociological viewpoints. But our concern is merely the financial effects as realized in current expense.

Perhaps the easiest mode of analysis is by functional costs, comparing old and the anticipated new for each major item. Exact studies would require weeks of painstaking detail and would end, in a measure at least, in conjecture. A cursory view will indicate trends definitely enough to answer the question - is it financially feasible.

Will administration, including supervision, be more costly? Table IV shows the expenditures necessitated by the township trustee system - \$11,770.00. To this we may add \$1800 salary and \$250 expense for the County Superintendent of schools - a grand total of \$12,820.00. The County Superintendent shall be replaced by an Assistant to the City Superintendent (who has become the Area Superintendent), and said Assistant, in charge of urban-rural elementary education and business manager of all the schools, may be expected to draw a salary of \$3000.00 with \$250.00 expenses. The superintendent may

TABLE IV. SALARIES AND EXPENSES OF TOWNSHIP TRUSTEES AND ADVISORY BOARD MEMBERS IN BARTHOLOMEW COUNTY, INDIANA, FOR CALENDAR YEAR 1934

TOWNSHIP	SALARY	OFFICE RENT	TRAVEL	TOTAL
Clay	\$ 600	\$ 60	\$125	\$ 785
Clifty	600	60	125	785
Columbus	1200	180	250	1630
Flatrock	720	60	150	930
German	720		150	870
Harrison	450	60	100	610
Hawcreek	800	75	175	1050
Jackson	450	60	60	570
Nineveh	450	60	100	610
Ohio	450	60	100	610
Rockcreek	600	60	125	785
Sandcreek	600	60	125	785
Union	450	60	100	610
Wayne	720	60	150	930
County Total				11,560
* Advisory Board Members				210
Grand Total				11,770

* Each member receives \$5 per year and each township has three.

draw \$4500.00 as wage and \$500 as allowance for expense. The City Attendance Office and the County Attendance Office can be taken care of by one person at the same total of salaries and expense as set in the present organization, about - \$1,500. The seven member City-County Board shall receive a total of \$1850.00.

The city high school principal will be unaffected, and the rural principals we shall treat as teachers and discuss them under that heading. The increase in costs of central administration under the new plan would total about \$6,000.00, allotted as follows:

Area Superintendent	\$ 750.00
Area Assistant	3250.00
Board	1850.00

But supervision, to be in keeping with the essential theory of the equalization of educational opportunity, must radically expand. At least three supervisors, or supervisor-special-teachers, should be added: Music, Art, and Agriculture. Each would cost \$1500.00 with \$500.00 travel - a total of \$6,000.00.

Medical and dental services can be extended under the auspices of social and professional organizations.

We save \$12,820 by abandoning the present trustee system. We add \$12,000 in administration and supervision -

TABLE V. AVERAGE NUMBER OF ELEMENTARY PUPILS PER TEACHER
BY TOWNSHIPS IN BARTHOLOMEW COUNTY, 1932-33

Clay	28	Jackson	40
Clifty	33	Nineveh	28
Columbus	38	Ohio	30
Flatrock	38	Rockcreek	34
German	48	Sandcreek	38
Harrison	45	Union	44
Hawcreek	33	Wayne	33

pupils can be taught with a staff of 70 teachers.

In order that we may not be accused of making unduly favorable estimates of lessened cost, it is advisable to use the pupil average of 35 which nets a saving of three teachers. The present wage is \$100.00 per month. The amount of reduction is, therefore, \$3,400.00.

The elementary principals as a group now receive \$140.00 per month in excess of the regular \$100.00 wage. The 8 new principals at \$125.00 would total an excess of \$1000.00 as a group per month. For all practical purposes, we may cancel the old and new and designate principals as distinct from teachers.

a net economy of \$820.00.

The 2774 elementary pupils in the county are taught by 82 teachers. Of these, 79 are in elementary positions and three are accounted for in the 6-6 organization, one in Flatrock Township and two in the school in Hawcreek Township. Table V. shows the average number of pupils per teacher in the several townships. The range is from 28 to 48. If we use 35 as the average, the reorganization can care for the same number of pupils with three less teachers - 79. And if we use 40 as average, which is undesirable from the pedagogical viewpoint, but which is the standard set in the recent Chicago School Survey, the pupils can be taught with a staff of 70 teachers.

In order that we may not be accused of making unduly favorable estimates of lessened cost, it is advisable to use the pupil average of 35 which nets a saving of three teachers. The present wage is \$100.00 per month. The amount of reduction is, therefore, \$2,400.00.

The elementary principals as a group now receive \$147.50 per month in excess of the regular \$100.00 wage. The 8 new principals at \$125.00 would total an excess of \$200.00 as a group per month. For all practical purposes, we can cancel the old and new and disregard principals' salaries as distinct from teachers'.

But lengthening the term from 8 to 9 months means spending \$7,900.00 additional each year, plus \$200.00 for principals.

Turning to the high school situation, we learn with surprise that the 58 pupils in Flatrock Township and the 121 in Hawcreek can be absorbed in Columbus High School without enlarging the staff. The average class enrollment in Freshman and Sophomore years is enough below 35 to permit taking in the pupils of those levels among the possible 179 new entrants. And, of course, the Juniors and Seniors can be taken care of with even greater ease.

This means that in Flatrock Township we can eliminate four teachers and in Hawcreek five - a total of 9. These nine now cost \$9,560.00.

The combined elementary and high school saving on teachers' salaries is approximately \$12,000.00. The added expense of the lengthened elementary term is \$8,100.00. The net saving is approximately \$4,000.00.

The major item of operation is transportation. The wages of janitors; fuel; supplies; water, light, and power; telephone; etc., should not vary greatly from the present standards of expense. But transportation can be expected to change in cost.

It would appear that the City-County Area plan will increase the expense of transportation not only totally but

TABLE VI. DAILY WAGES OF THE SCHOOL BUS DRIVERS OF BARTHOLOMEW COUNTY, INDIANA, FOR THE SCHOOL YEAR 1933-34

Clay	<u>5.80</u>	4.75	4.35	4.75					
Clifty	<u>6.25</u>	<u>6.00</u>	4.50	3.75	3.75				
Columbus	5.80	5.10	5.00	2.75	2.60	2.50	2.00		
Flatrock	3.75	3.35	3.25	3.20	2.89	2.80			
German	<u>6.90</u>	6.48	5.98	5.90					
Harrison	<u>4.47</u>	3.74	2.09	1.95					
Hawcreek	4.75	4.60	4.35	3.95	3.94	3.75	3.50	4.75	4.35
Jackson	3.86	1.21	.99						
Nineveh	5.25	5.00	3.75						
Ohio	<u>5.00</u>								
Rockcreek	<u>9.45</u>	4.25	3.95	2.90					
Sandcreek	<u>8.00</u>	<u>7.50</u>	5.75	5.45					
Union	<u>4.60</u>	3.75	2.50						
Wayne	<u>7.50</u>	7.50	<u>5.50</u>	5.25	5.00	5.00			
Average	4.42				Median	4.45			

Those underlined are wages of drivers who in addition to a regular route haul high school pupils to Columbus.

Not all of these would be transported. The law now will compel transportation under 1½ miles. Doubtless a part of them could be eliminated from the transportation program, leaving approximately \$250.

relatively. More pupils will be hauled which raises the total cost; and greater distances will be covered, which raises the relative cost. It would be easier to arrive at a satisfactory tentative estimate of transportation costs under the City-County Area Plan if it were not for the greater distances involved.

From this viewpoint, to use present per pupil per day costs as a multiplier would not approximate the expense under the new conditions.

However, other factors intervene to reduce costs. With our new state support of roads reaching into local areas, and with a regularly routed reorganized elementary school system established, we can reasonably expect the bargaining power of the centralized office of the city-county area to effect remarkable economies.

And with the advent of the Deisel motor in truck and bus transportation, which is imminent, costs will fall to such low levels that all our transportation troubles, so far as finance is concerned, will be forgotten overnight.

There were 2774 elementary pupils in the rural area of Bartholomew County reported for the school year 1932-33. Not all of these would be transported. The law does not compel transportation under $1\frac{1}{2}$ miles. Doubtless 5 per cent of them could be eliminated from the transportation program, leaving approximately 2650.

The cost per pupil per day for the state of Indiana for 1932-33 was 12 cents, and, in this instance, a nine months term, 180 days, is contemplated. The cost per pupil per year would be \$21.60. And for 2650 of the pupils in the county, the cost of elementary transportation would be \$57,240.00. The cost of transporting 1908 pupils in 1932-33 was about \$40,000.00 (actually, it was \$39,548.95 in 1932-33 with the costs of 33 pupils in the 7th and 8th grades of a 6-6 school unallocated). This means an increase of \$17,240.00, moving 1750 more pupils.

High school transportation costs would increase because the 58 pupils in Flatrock Township and the 120 pupils in Hawcreek Township would be moved to Columbus. However, the additional cost would be only that occasioned by traversing the 8 miles from Clifford in Flatrock Township and the 14 miles from Hope in Hawcreek Township, to Columbus. Six townships with comparable distances involved manage to bring their 248 high school pupils to Columbus under the present organization at a cost of \$4,237.00 per year; an average of \$17.08 per pupil. On this basis, the two townships would undertake an increased expense of \$3,040.95.

Elementary and high school increases due to complete transportation would amount to about \$20,000.00 per year.

It is practically impossible to make comparisons regarding maintenance. The repair and upkeep of buildings

and grounds, of building equipment, and of hacks and buses would in all probability not increase. The newness of the structures would reduce maintenance charges and the greater number of bus bodies would increase it. After ten years of reorganization a better estimate might be obtained and it probably might not exceed the amount of \$4000.00 annually, as at present.

Fixed charges, - rents, insurance, interest on bonded debt and on temporary loans - lead us into the question of first cost. Insurance probably would not increase. Rates would be lower for fire proof structures. And the consolidated buildings already in existence occasion an insurance bill at present equal to that which would be necessary for the 8 buildings at the new elementary centers. Interest is related altogether to first cost. The permanent nature of the reorganization ought, however, to be considered by critics of the interest bill. Once the interest subsides, within its 15 year period, it will not reappear for a half century. We shall disregard both insurance and interest - insurance because it likely will not change, interest because it is not a current cost, in the strict sense of the term.

Coordinate and Auxiliary Activities should increase in cost. Library service, however, will be strengthened through centralization, and health service will expand

gradually under the support of social organizations interested in welfare work. It is practically impossible to estimate increases. Here again we meet the question of first cost. After the establishment of libraries, the current cost per pupil will be materially decreased because more pupils have access to each book. Health service, with less scattering of pupils, should be able to effect economies even in the face of expanding its program.

Payments for school transfers among schools within the county will cease altogether. Only pupils going outside the county may necessitate loss.

Debt Service and Capital Outlay we have decided to omit from discussion as directly related to the separate problem of first cost.

To summarize, we find:

Grand Total	Decrease	Increase
Administration		
Supervision	820.00	
Instruction	4,000.00	
Operation		20,000.00
Maintenance	---	---
Fixed Charges	---	---
Auxiliary Activities	---	---
Totals	4,820.00	20,000.00
Net		15,180.00

TABLE VII. CURRENT SCHOOL EXPENDITURES, BARTHOLOMEW
COUNTY, INDIANA, 1932-33

	City	County	Area
Administration	7,202.94		7,292.94
Supervision	13,083.70		13,083.70
Instruction	88,342.00	90,936.13	179,278.13
Operation	18,228.68	58,309.88	76,538.56
Maintenance	2,495.18	3,917.01	6,412.19
Fixed Charges	10,607.91	10,682.09	21,290.00
Auxiliary Activities	5,995.83	95.28	6,091.11
Debt Service		14,915.00	14,915.00
Capital Outlay		1,154.66	1,154.66
Grand Total	146,046.24	180,010.05	326,056.29

(Transfers are not included)

(Note that administration in townships is not reported.

Trustees are paid from a separate fund.)

Such an increase is not unreasonable or prohibitive. It is caused by the expansion of the transportation program.

In 1932-33, What fraction of the total expenditure for schools is this \$15,180.00 additional cost? During the school year 1932-33, the county spent (transfers excluded) \$180,010.05. The city (playgrounds excluded) \$143,742.81. The total is \$323,752.86. The \$15,180.00 excess contemplated is less than 5 per cent of the grand total.

The amount of local levy on property to care for this 5 per cent increase is a measure of its financial importance. Even though the state may eventually furnish a great deal of money, perhaps \$80,000.00 through the gross income tax; \$15,000.00 through the Common School Apportionment; \$3,000.00 through Congressional Interest; \$2,250.00 through Vocational Aid; \$5,000.00 through Excise tax; and \$10,000.00 through the tax on Intangibles; a total of \$115,250.00 - yet that is but one-third of the full program.

Consequently, it is necessary to translate the \$15,180.00 into terms of local levy. The combined net assessed valuations of the city and county for March 1, 1934, was \$27,200,655.00.

One cent levy would raise \$2,720.00. It would require a 5 per cent increase in the levy to meet the additional current costs of the reorganization program.

Such an increase is not unreasonable or prohibitive. It is caused by the expansion of the transportation program.

In 1932-33, in the state as a whole, only 8 per cent of the total current costs were transportation payments. There is, therefore, no reason for financial alarm at the prospect of more transportation under the Area plan.

Added current costs would soon be forgotten in the satisfaction arising from improved school conditions.

A problem of major consequence in the establishment of an actual working basis of the City-Country Area Plan is the provision of well located and adequate housing. To superimpose a new pattern of school units upon an already long established system develops a large number of difficulties, a few of which stand out as type forms worthy of analysis.

It probably never will be said that the seriousness of this problem of housing is underestimated. For years it has retarded consolidation of the ordinary rural town-center type. Only when both educational and financial values relegated the one-room school to the background did the consolidation movement gain full headway.

CHAPTER VII

In 1890 there were 100,000 one-room schools in Indiana. In 1922 there were 10,000. In 1934 the number was reduced to 1,000.

APPLICATION OF THE CITY-COUNTY AREA PLAN IN BARTHOLOMEW

COUNTY: HOUSING AND CAPITAL OUTLAYS, HAS LEFT

us with certain investments in buildings whose structural utility promises Housing in Reorganizational vitality, and to act as a definite hindrance to the modernization of educational

A problem of major consequence in the establishment on an actual working basis of the City-County Area Plan is the provision of well located and adequate housing. To superimpose a new pattern of school units upon an already long established system develops a large number of difficulties, a few of which stand out as type forms worthy of analysis.

It probably never will be said that the seriousness of this problem of housing is underestimated. For years it has retarded consolidation of the ordinary rural township center type. Only when both educational and financial values relegated the one-room school to the back-ground did the consolidation movement gain full headway.

And now the (75) motor transportation has

Indiana Education Survey Commission, Public Education in Indiana, pp. 213-215. General Education Board, 41 Madison, New York City, 1925.

Indiana School Directory, State Department of Public Instruction, Indianapolis, Indiana, 1925-26.

In 1890 there were about 8790 one teacher schools in Indiana. In 1922 there were but 4800.¹ In 1934 the number was reduced to 1613.² Now, that movement, in its turn, only just completed so far as is readily practicable in Indiana, has left us with certain investments in buildings whose structural utility promises to outlive their functional vitality, and to act as a definite hinderance to the modernization of educational housing.

The truth of the matter is probably that this factor has long been given unreasonable weight. If attention were paid to its obviation instead of to its effect of doom, progress might go forward with surprising speed. An analogy is found in today's marvel, the automobile, whose present perfection has depended in large part upon what seemed impossible - a national network of smooth hard surfaced roads. The cost of these highways has been terrific and the public complaint very feeble indeed.

Education, upon which enlightened self government has always, almost pathetically, depended, deserves at least as much clearness and vitality of program as does motor transportation. And now that motor transportation has

¹Indiana Education Survey Commission. Public Education In Indiana, pp. 214-215. General Education Board, 61 Broadway, New York City, 1923.

²Cole, Geo. C. Indiana School Directory, State Department of Public Instruction, Indianapolis, Indiana, 1933-34.

become so well established, perhaps it is sensible to point out the fact that one of the most serious instances of failure of man to utilize the machine for his social benefit has been his halting use of it in promoting proper administrative units in his system of education. total school of 174. however, this readjustment would mean the abandonment of a new four room - Present Adequacy of Housing Crossing. This building, re-erected after a fire, is a striking example of the Even when adequate school housing is already in existence, and no capital outlay is necessary, needs of adjustment frequently arise upon the application of the City-County Area Plan. And yet, to abandon the new structure Casual observation reveals the fact that in a great number of townships or groups of neighboring townships, in Indiana it will be found upon survey that adequate the well located buildings are ready for occupancy by the reorganized, enlarged elementary school. The old unit has been a combined elementary and secondary school, in grades one to twelve, and the removal of the high school to a centralized city-county location will leave enough room for the comfortable housing of the new elementary school. Some remodeling will, of course, be necessary - laboratories, assemblies, undersized classrooms, etc., but the investment in capital outlay will be negligible.

A situation of exactly this type occurs in Flat-rock Township, Bartholomew county.¹ The township high school of 58 pupils at Clifford, sent to Columbus, has enough building space for the elementary children from St. Louis Crossing to be included in a total school of 174. However, this readjustment would mean the abandonment of a new four room elementary school at St. Louis Crossing. This building, re-erected after a fire, is a striking example of the costliness of neighborhood jealousies both in educational and in financial values. Clifford could have housed the 45 pupils of St. Louis Crossing, even while maintaining the township high school. And yet, to abandon the new structure now would seem a glaring waste to those who are paying the bills.

In Hawcreek Township, Bartholomew County, upon the abandonment of the township high school at Hope and the transportation of the secondary school pupils to Columbus, all of the elementary pupils, 371, can be well housed in the building which formerly cared for grades one to twelve. This will entail the desertion of five classrooms in an old but fairly well conditioned building in the center of the township, outside the town of Hope, - Hawcreek

¹Ibid. "Bartholomew County", Pp. 34-36

Central - and three classrooms at Hartsville in a good building.

In German Township, Bartholomew County, at Taylorsville, a new elementary building already housing 171 pupils, can easily care for 300 without remodeling. All of the pupils in Nineveh Township and those residing in the north half of Union Township can readily be transported to Taylorsville, making a school of 298. This consolidation point, off center geographically, is well located according to the distribution of population for the area, is served by good roads, and offers the advantages of a village location. The thoroughly modern building includes a full size gymnasium with bleachers and stage.

At least two other variants of the housing situation presenting problems in spite of, or because of, adequate buildings for the new elementary schools, although not found in Bartholomew County, are easily possible as occasional occurrences in counties throughout the state.

First, the one consolidated building in a populous township, anticipated as an elementary center in the City-County area plan, may now house from 250 to 300 elementary students and 150 or more high school students. When the latter are moved to the county seat secondary school center, the building is left too large for its purpose and space is wasted.

And, secondly, two townships, neighborhoods, each with a consolidated school for grades one to twelve, with equal enrollments in each township, with equally good roads and general facilities, may debate bitterly which one shall receive the new elementary school in the building which formerly housed the combined elementary and high school, still adequate for the new purpose; and which one shall suffer abandonment.

Thus it is that even with ample building facilities the new organization, the City-County Area Plan, finds embarrassing problems awaiting solution - problems arising from the abandonment of old and perhaps of new buildings, of too much space in the chosen elementary center building, of poor location, of intertownship neighborhood disputes over which building shall be used, etc.

But these problems grow less and less important when all people concerned learn to view them in the light of that most fundamental principle - "the school is organized for the child".

Lack of Housing

The problem of housing, particularly that of the elementary centers, naturally becomes most acute when inadequacy is met.

Many county seat high school buildings lend themselves to reorganization on the City-County basis by structural enlargement, by the simple addition of new class rooms. The gymnasium and special service rooms are already in use. Moreover, the power of absorption of additional pupils in the current classes of a secondary school is remarkable and often makes the necessary remodeling of a building less than anticipated. Columbus High School, for instance, can receive the Flatrock Township and the Hawcreek Township High Schools and care for them with no expansion of plant at all. On the other hand, many high schools show a need for radical enlargement. An instance is that of Fowler, in Benton County. Less than 200 pupils, grades 9-12, now attend at the county seat, but with centralization more than 800 will enroll.¹

Certain elementary centers will require an out and out new building on a new location. In Bartholomew County the application of the City-County Area plan would necessitate the erection of new elementary schools in Wayne Township and in the western part of Columbus Township. Each of these schools would house about 300 pupils. The general floor plan

¹Ibid. Pp. 36-38

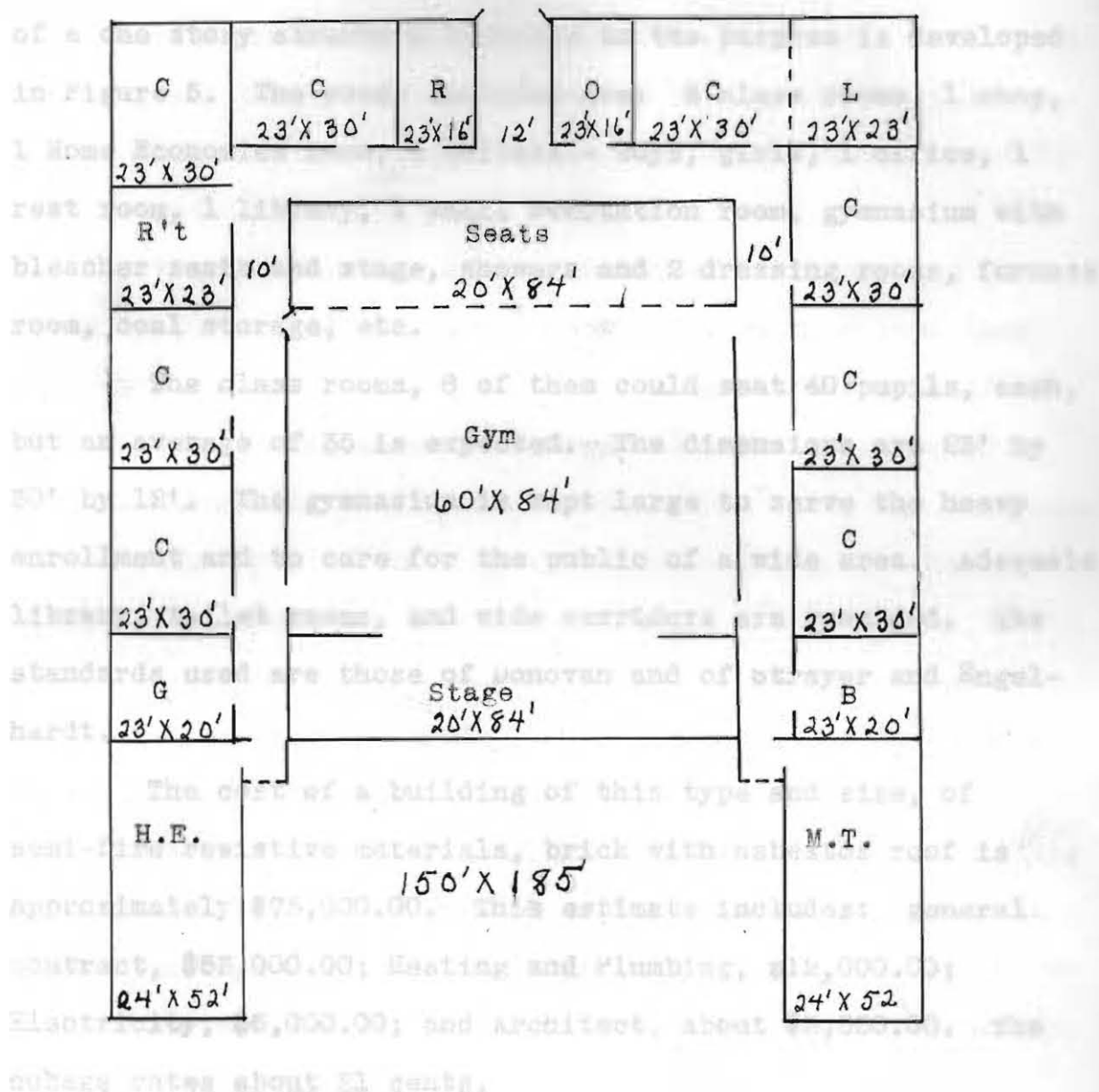


Figure 5. General Layout of Main Floor of A Suggested One Story Type of Elementary School Building

Three questions regarding capital outlay arise:
How much investment in new buildings and in remodeling

of a one story structure suitable to the purpose is developed in Figure 5. The rooms included are: 8 class rooms, 1 shop, 1 Home Economics room, 2 toilets - boys, girls, 1 office, 1 rest room, 1 library, 1 small recitation room, gymnasium with bleacher seats and stage, showers and 2 dressing rooms, furnace room, coal storage, etc. is undoubtedly smaller than that

The class rooms, 8 of them could seat 40 pupils, each, but an average of 35 is expected. The dimensions are 23' by 30' by 12'. The gymnasium is kept large to serve the heavy enrollment and to care for the public of a wide area. Adequate library, toilet rooms, and wide corridors are provided. The standards used are those of Donovan and of Strayer and Engelhardt. in Bartholomew County must be borne in cooperation by

The cost of a building of this type and size, of semi-fire resistive materials, brick with asbestos roof is approximately \$75,000.00. This estimate includes: general contract, \$53,000.00; Heating and Plumbing, \$12,000.00; Electricity, \$6,000.00; and Architect, about \$3,550.00. The cubage rates about 21 cents. less expense than their per

cent allotted, they are to be credited against the time when they will need help. Capital Outlay, of course, retains some

Three questions regarding capital outlay arise:

- (1) How much investment in new buildings and in remodeling

TABLE VIII. CITY-COUNTY AREA PLAN, BARTHOLOMEW
 is indicated in Bartholomew County, (2) What units shall levy, collect, and distribute the necessary taxes, (3) Must the change to the City-County Area Plan be abrupt so far as buildings are concerned?

A crude estimate of the amount of investment is outlined in Table VIII. This is undoubtedly smaller than that necessary in some counties for the reason that no expenditure need be made in the central high school. On the other hand, many counties find all elementary buildings ready for occupancy in the structures of their former schools which have housed grades one to twelve.

The total amount of \$388,000.00 of estimated capital outlay in Bartholomew County must be borne in cooperation by the city-county area and by the state. We may expect the state in normal times, to find that its local school districts have spent about 14 per cent as much in capital outlay as in current expense.¹ If the state carries the load, it will furnish to any one local corporation enough to meet emergencies. In case a City-County Area had less expense than their per cent allotted, they are to be credited against the time when they will need help. The state should, of course, retain control.

¹Grossnickle, Foster E. Capital Outlay in Relation to a State's Minimum Educational Program. Bureau of Publications, Teachers College, Columbus University, 1931.

TABLE VIII. CITY-COUNTY BUILDING PROGRAM, BARTHOLOMEW
COUNTY, INDIANA

Any local property tax support of capital outlay should be borne by the whole City-County Area. It seems

School	Construction	Cost
German	No changes	---
Flatrock	Slight remodeling	\$ 2,500.00
	New gym at Clifford	45,000.00
Hawcreek	Slight remodeling	2,500.00
	New gym at Hope	45,000.00
East Columbus	Add 6 classrooms	10,500.00
	New gym	45,000.00
West Columbus	New building	75,000.00
Clay	Add 4 classrooms	7,000.00
	Remodel gym	25,000.00
Sandcreek	Add 6 classrooms	10,500.00
	New gym	45,000.00
Wayne	New building	75,000.00
Total		\$388,000.00

The transition from township to City-County Area must be, so far as buildings are concerned, gradual. The re-organization does not permit the acceptance of any but rapid graduation of pupils in classes. Perhaps gymnasiums will have to wait in many instances. The gymnasiums alone are estimated at more than three-fourths of the total cost in Bartholomew County.

over the plans and standards of school buildings.

Any local property tax in support of capital outlay should be borne by the whole City-County Area. It seems certain that local communities will have to help the state in initiating the required building program - the expenditure at the outset is too far above normal to expect the state to handle so large a total amount of capital outlay. Ideally, however, and in the course of time, the state should equalize capital outlay just as it should current expense.

The sources of taxation locally are property and poll taxes; in the state are property, income, intangibles, liquors, etc. The state distribution for capital outlay should be on the basis of need according to predetermined standards derived from a consideration of local requirements and of state total fund limitations.

The transition from township to City-County Area must be, so far as buildings are concerned, gradual. But the re-organization does not permit the acceptance of any but rapid gradation of pupils in classes. Perhaps gymnasiums will have to wait in many instances. The gymnasiums alone are estimated at more than three-fourths of the total cost in Bartholomew County.

CHAPTER VIII

APPLICATION OF THE CITY-COUNTY AREA PLAN IN BARTHOLOMEW COUNTY: SOCIAL PROBLEMS OF THE CENTRAL HIGH SCHOOL

The consolidated central high school in the City-County Area will exhibit characteristics that are not at present in common evidence in the average rural or urban secondary school of Indiana. There are, however, even now a few high schools in the state which combine large bodies of urban and rural population. And, from an observation of them, we may readily visualize the nature of such characteristics. One of these schools is Columbus High School which in September 1934 enrolled 467 county and 463 city students.

As the relative amounts of rural and urban school populations assume a balance, we approach what will likely be the average condition in our City-County Area central high school. A brief survey of the effects of a rural influx in the Columbus High School may serve to indicate a few of the problems involved and the benefits and evils derived.

For a number of years, during the recent period of secondary school growth, Columbus High School has attracted pupils from within the county by the reasonableness of the tuition transfer charge. Small rural high schools have been constructively discouraged, and the central high school has prospered both in the total number of pupils enrolled and in financial support. The enrollment of 930 in a city of 10,000 is unusual indeed. For the fiscal year ending July 31, 1934 the cost per pupil enrolled was \$71.02, while the cost for the city tax rate for school purposes payable in 1934 was \$0.775.

The color and character of the school arise in large part from its: (1) size, and (2) balanced rural-urban enrollment.

From a school of what would be five hundred pupils under ordinary circumstances obtaining in cities of like size in Indiana, the enrollment has been swelled by rural pupils to nearly one thousand at various times in recent years. In 1934-35 the high school employed thirty-one full time teachers, and, including part time, thirty-seven teachers. The advantages accruing from size alone are at once apparent. More teachers, more classes, more courses, increased pupil competition,

the social life of the school is furnished in the main part by the city pupils.

and extended school accomplishment are natural outcomes. Five curricula are offered - high school liberal arts, the college preparatory course, commercial training, agriculture, and shop work. The sense of bigness is in itself an inspiration to better work and to greater school loyalty. the friendships al-

ready The pupils from the country, however, are not an unmixed good. They bring certain definite disadvantages as well as benefits. The urban-rural fusion movement is but getting under way and its results are meager and as yet scarcely felt. The country pupil brings characteristic attitudes and inhibitions which deliver both worthwhile contributions and embarrassing handicaps to the work and life of the school.

prove Above all things the fact can never for a moment be overlooked that he arrives by bus at the latest possible moment in the morning and is snatched away within five minutes after the close of school in the afternoon - never does he have even a fair opportunity to develop companionships informally through the ready contacts afforded by school activities out of hours. Consequently, he is never completely merged into the large social group which makes up the school. Nor is he ever much intrigued by basketball and other athletics. The vigor of the social life of the school is furnished in the main part by the city pupils.

One can readily imagine that the urban student feels no particular responsibility in the personal and social development of these students from the outside. They are there--nice enough folk if one cares to cultivate them--but few are attractive enough to offer competition to the friendships already established and kept warm by constant contacts. Their competition in class is welcome. There is really no coolness and no conflict, no segregation - but simple lack of genuine social mergence. Moreover, these rural students are using the buildings the parents of city students have built. Their only repayment is the increased size of the school - which, under the handicaps of the transportation system, does not prove to be a matter of much social importance.

The central high school idea, however, is not to be condemned because of this condition. Four phases of the problem should not be disregarded. First, social life, although important, is not the dominant purpose of the school. All modern credos to the contrary, it must be admitted upon basic analysis that the school exists for the transfer of knowledge and the training of the mind. Second, the rural entrant sees the urbanite in social action and even if the race has had too early a start for him to place--he gets a

chance to observe the technique so that he can apply it in his later life situations--a chance he cannot otherwise have had, in such intensity in so large a group. Third, as urban-rural fusion continues, differentiation will lessen and the incoming pupils will be at less social disadvantage. Larger elementary schools will provide fields of practice. And fourth, the central high school can help by scheduling activities periods in the school day which will permit participation by rural pupils in the social life of the school.

Another condition deserving attention is the fact that the rural student has less pocket money than his urban class mates, less experience and felicity in attractiveness of dress and appearance, and less brightness of sophistication from a dearth instead of a wealth of social contacts. He sometimes tends to retire more and more instead of to expand in the light of his greater social opportunity, and to seek satisfaction in a very narrow circle of friends, failing to think of the school as a whole as his school, and spending his effort in the achievement of high marks in his studies. He develops into a specialized scholastic leader of immense value and with a proper place in so large a student body.

The average rural pupil brings with him a serious purpose in study. He has had thus far in his schooling less

of opportunity for enrichment than he now has, and, consequently makes the most of his new chances. A few pupils, it is true, lose themselves in the distractions of a larger school and in the colorful company of experts in evasion, mischief, and vice. But the great mass of rural students provides a sound core of moral strength, idealism, and working morale which joined to that of urban students, assures a school of the better type.

In fact, the high school, centered at the county seat, is the field of sharpest focus for the whole urban-rural fusion idea. The forces of conflict are there most intense. The picture given of Columbus High School is that of a fifty-fifty high school operating under the conditions of today when fusion is in its earlier stages and the movement has not advanced enough to materially reduce the differentiation existing between city and country modes of life and ways of thinking. But a forecast of future developments of the Area plan reveal that the consolidated central high school is a bigger and saner institution than the formalized little rural high school or the too intensified city high school. Of all types of secondary schools, it is the most potentially productive of scholastic achievement and of human values.

CHAPTER IX

THE CITY-COUNTY AREA SCHOOL UNIT BILL

The enactment into law of the City-County Area School Unit depends, of course, upon the submission of a clearly written bill and upon the will of the legislators. For our present purposes, there is a good reason for the writing of the bill even before the question comes up for the favorable or unfavorable attitude of those who are to pass upon it. A bill is a definition of a plan by outlines of action. It is one thing to describe the outward appearance of a project such as the City-County reorganization, and quite another to lay bare its essential dynamic structure. The latter process reveals all the practical phases of the idea and discloses strength and weakness. Moreover, it is found by those who would re-pattern parts of our legal network that it is extraordinarily difficult to fit a new idea into the general scheme of things fashioned over a long period of time and for an earlier day.

The City-County School Unit, for instance, uses the tax levying and collecting system of the civil corporations as did the townships. The preparation and review

of budget is an unchanged procedure. But the corporation interested is the whole City-County Area instead of the numerous small units formerly active.

The City-County Area, so far as its own essential purpose is concerned, finds it useful to continue without change the present method of dealing with the enforcement of pupil attendance; the certification and tenure and minimum wages of teachers; the offering of uniform courses of study; the selection of textbooks; the length of school day and school term; the provision of convenient, comfortable, safe, and economical transportation; the procedure in the planning and construction of school houses; etc.

Much will by force of circumstance and of custom, come about without legal creation. The Area Superintendent, for instance, because he is chosen to direct the schools of both the urban and rural areas merged into a unit, will undertake a periodic survey of his schools and of urban-rural social fusion. He will identify himself with both urban and rural social organizations. He may even deem it wise to maintain an office outside the city school buildings readily accessible to urban and rural citizens alike. He will find that he must budget his time to care for the whole area, driving frequently out into the country. He will be especially interested in

total area comprised within the civil county: said unit to

the urban-rural supervisory and teaching program and the courses of study intended to enrich the Area educational offering.

And much will be completely eliminated - the trustee system, the one-room rural school, the tiny high school, the inequalities of township taxes, the sharp differentiation of progress in rural and city schools, and the wasteful buying of supplies and equipment.

Much of the old is kept and used, much of the old is reshaped, and much of it entirely eliminated. With this idea of the difficulty of fitting the City-County reorganization plan in the whole body of school law and practice which we now have in Indiana, and with the idea, too, that the writing of a proposed law is good exercise in definition, the following tentative draft of a bill is submitted:

A BILL FOR AN ACT to provide for the establishment and administration of the City-County Area Unit for Public Schools.

SECTION I. BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF INDIANA, that the local unit of administration for the public schools of this state shall be the total area comprised within the civil county; said unit to

SECTION 4. Prior to the school year 1942-43, the

include without distinction of boundaries the school townships, school towns, and school cities located within the civil county, and to be empowered as a single school corporation known as the City-County Area School Unit.

SECTION 2. The City-County Area School Unit shall be considered as a subdivision of the State and the local Area Board of Education shall cooperate with and shall be subject to the control of the State Board of Education in the execution of policies and standards, the submission of records and reports, and in the promulgation of an unified and progressive state system of public school education.

SECTION 3. The local control of the public schools of the City-County Area shall be vested in a Board of Education of seven representative lay citizens elected to membership by popular vote at the times of regular congressional and presidential elections. Three of these seven members shall reside within and be legal residents of the county seat city or town, three shall reside within and be legal residents of the county outside the county seat city or town, and the remaining one member shall be an owner and operator of a farm which shall be located within the county and he shall reside within and be a legal resident of the county seat city or town.

SECTION 4. Prior to the school year 1935-35, the

seven members of the Area Board shall be elected to first terms as follows: the three urban members to terms singly of one year, two years, and three years respectively; the three rural members to like terms; and the city resident farm owner and operator to a term of three years. Thereafter, each of the seven members shall be elected to a term of three years. Vacancies in unexpired terms shall be filled by appointment by the local judge of the circuit court.

SECTION 5. No urban member of the Area Board shall be elected from the same political ward as another. No rural member shall be elected from the same City-County elementary or high school district as another.

SECTION 6. The Area Board shall reorganize its own body each fiscal year, electing for a one year term without immediate self succession a president, a secretary and a treasurer.

SECTION 7. The president of the Area Board shall receive a salary of five hundred dollars per year, the secretary three hundred and fifty dollars and the treasurer two hundred and fifty dollars per year, and the remaining members each one hundred and fifty dollars per year. They shall receive reimbursement for reasonable expenses incurred in the pursuit of their duties as members of

of the Area Board.

SECTION 8. It shall be the duty of the Area Board to appoint a Superintendent of Schools and fix his salary. His qualifications, duties, tenure, and rights and privileges shall be those of a city superintendent except that he shall be expected to be sympathetic toward, understand, and direct both urban and rural schools in the county area.

SECTION 9. Upon the recommendation of the Superintendent the Board shall appoint all employees and fix the salaries thereof.

SECTION 10. The Area Board shall under the direction of the Area Superintendent and subject to the approval of the State Board of Education district the schools of the City-County Area School Unit. Said districting shall be first devised and later kept continuously revised in such manner as to provide elementary schools of sufficient enrollment to operate efficiently on the minimum standard of at least one teacher per grade, or the equivalent thereof for departmentalized groups; and, as to provide for the complete consolidation of all high schools at the county seat city or town except in situations resulting in enrollments in excess of one thousand pupils, in which case, however, no other high school of

less enrollment than five hundred pupils shall be maintained in the county area. Reasonable discretion shall be exercised in emergencies due to factors of extreme sparsity or extreme density of population, of road conditions of public waste to remedy, of temporary expediency because of time necessary for thorough reorganization, and of uncertainty occasioned trends of population.

SECTION 11. The Area Board under the direction of the Superintendent and subject to the approval of the State Board of Education shall administer the building and the transportation programs for the City-County Area.

SECTION 12. No tuition transfer charges shall be levied, collected, or cancelled. No pupil may attend school across county lines except by approval of the State Board of Education, which body shall make financial allowances therefor in its distribution of state school tuition funds.

SECTION 13. The public and the school libraries shall be operated as a unit under the management of a City-County Area Librarian appointed by the Board upon the recommendation of the Superintendent.

SECTION 14. The Board shall hold title to all school properties within the area unit and under the direction of the Area Superintendent shall administer school finance.

SECTION 15. All taxes levied locally for the support of schools shall be uniform throughout the City-County Area.

SECTION 16. The State shall assist the Area Unit in the financial support of the operation of schools, guaranteeing \$600 per teaching unit of 35 elementary or 25 high school pupils as shown by the average daily attendance of the Area unit, said moneys to be derived from the collection of gross income tax as already provided for in the gross income tax law.

SECTION 17. The State shall assist the Area Unit in the establishment, and current remodeling, repair, and replacement of school buildings in the proportion commensurate with needs over the State as a whole. The Capital Outlay Fund shall be derived by a State property tax, budgeted and administered by the State Board of Education. Said property tax shall not exceed five mills per dollar of net assessed valuation.

SECTION 18. All laws and parts of laws in conflict herewith are hereby repealed.

CHAPTER X

SUMMARY AND RECOMMENDATIONS

The purpose of this dissertation has been the submission to Indiana educators of the general outlines of the City-County Area School Unit idea with a view to its possible adoption in this State.

The proposed new unit provides that the total urban-rural school population of the civil county shall be under the control and in the care of one superintendent, one board, and one supervisory and teaching staff.

The plan is simply that we shall use the new mobility of our modern mechanical age to assemble pupils in groups large enough to assure the opportunity for an education which can be expert as to administration and instruction, specialized as to curricula and courses of study, and integral and democratic as to the whole design of the natural urban-rural social pattern.

Practically all of the educational progress since the Civil War has been city progress. Today, in our own cities and counties in Indiana we find frequently the poorest type of one teacher rural elementary school or three teacher high school within an easy drive of fifteen

minutes (over good roads) from urban school systems of which we are very justly proud. This rural neglect is as yet uncorrected because cities in the extraordinary rapidity of their growth have found it necessary not only to employ all the expert educational leadership available but also to insist that their own increasingly complex and intense problems be solved to the exclusion of all else. Rural areas have not had the money to bid for leaders.

But more and more has come into public consciousness the accepted truth that a democracy must provide equality of opportunity for pupils and a generalized support of schools affording such equalized opportunity. And likewise, the development of urban-rural social fusion has become commonly accepted as a necessary part of the interdependent life of modern times.

Since cities naturally are already and will continue to be economic, social, and cultural centers, we must expect city educational leadership to undertake the solution of the problem of reorganizing the local school systems and of the problem of effecting city-country social fusion.

The suggested outline of the City-County Area School Unit proposes that it shall be administered by a Board of seven citizens equally representative of urban and rural interests. The Superintendent shall have the rights and

The rural elementary schools were reduced from

duties that now characterize the office of city superintendent, but he shall be expected to work at the major problem of fusing urban and rural school and social life. The City-County Area shall be a school unit in matters of finance; school properties; school staff; special services, such as - library, pupil health, vocational supervision. All control - general, business, and educational - shall center in the Board through its executive, the Superintendent.

Elementary schools throughout the City-County Area shall be large enough to provide at least one teacher per grade, enrolling about 275 pupils. The high school shall be centralized at the county seat city or town, and if more than one thousand pupils are concentrated there, zone centers enrolling not less than five hundred may be established.

The majority of counties in Indiana will find the reorganization contemplated quite feasible and highly desirable. For the purpose of establishing feasibility a theoretical application of the plan to the schools of the author's home county, Bartholomew, has been attempted in this study.

School locations were readily made, taking into consideration optimum enrollments, distances involved in transportation, character of roads, and distribution of population. The rural elementary schools were reduced from a

scattered 37 to a purposeful, concentrated 8. All high school pupils were absorbed in the county seat system at Columbus.

No functional items of current costs were estimated to increase except transportation. Decreases in other items showed the net increase in total operation to be \$15,000.00. Expressed in terms of the local tax rate on property, this would amount to an additional levy of five cents and a fraction.

The problem of housing showed upon analysis the need of two new buildings, and the remodelling of five existing structures including the erection of four gymnasiums. One elementary school already provided ample space and facilities. No changes were necessary to care for all high school pupils at the county seat. The estimated capital outlay amounted to \$388,000.00. Three-fourths of the total expenditure could be postponed by delaying the construction of the gymnasiums.

The application of the City-County Area School Unit to the schools of Bartholomew County, cursory and crude as it may be, shows definitely in rough outline that the plan is practical. Careful studies need to be made in several representative counties in Indiana to establish exact details of reorganization and of costs.

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